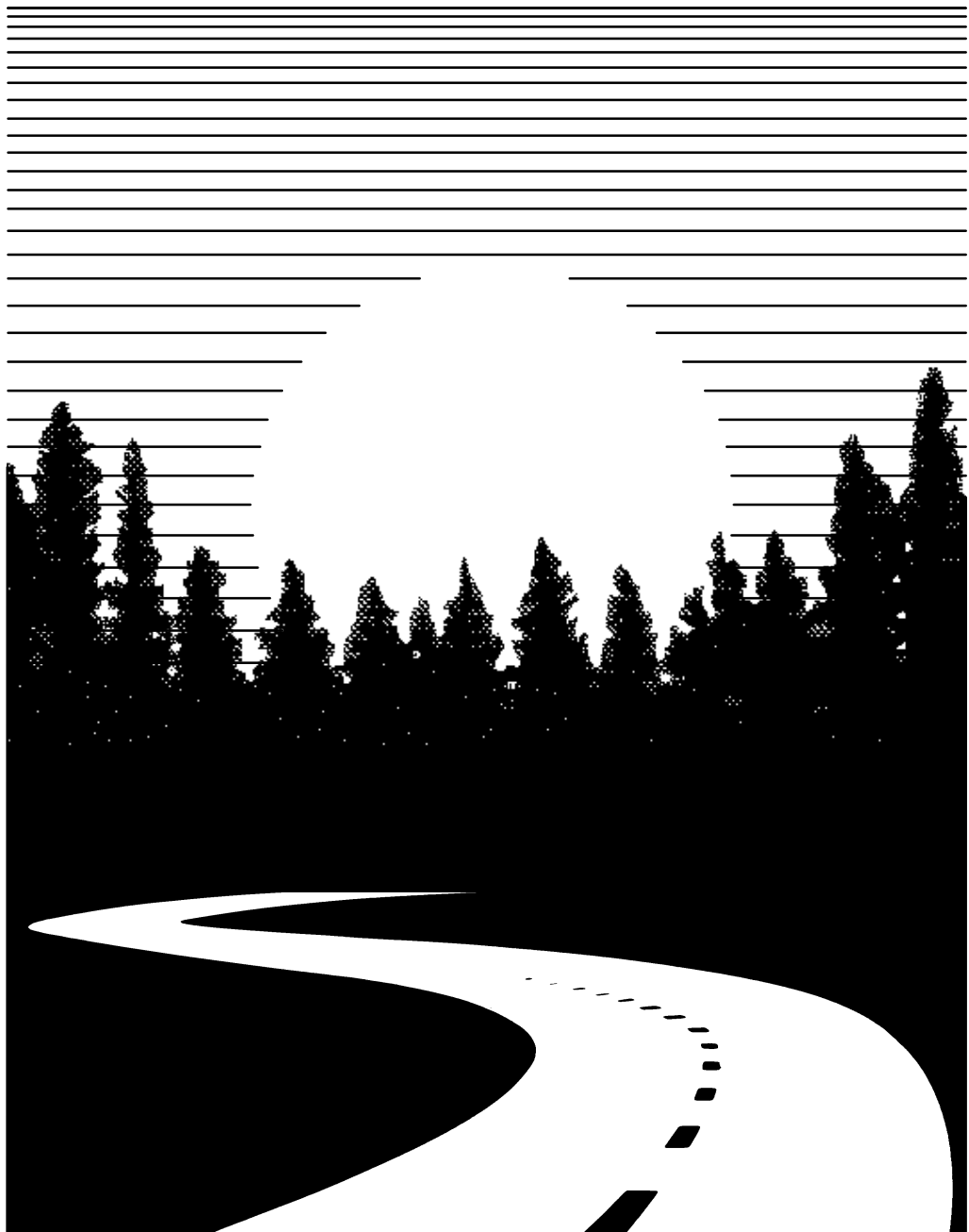


Onan

Genset

Parts Catalog

**HDCAA
HDCAB
HDCAC**



Printed in U.S.A.

981-0259B
7-99 (Spec A)
Replaces 7-97 (Spec A)

MODEL IDENTIFICATION

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO. and SERIAL NO. from the Onan nameplate.

For handy reference, insert your nameplate information in the spaces below.

MODEL AND SPEC NO.

SERIAL NO.

DIGITAL CONTROL SOFTWARE VERSION
AND DATE (IF APPLICABLE)

SAFETY PRECAUTIONS

The following symbols are used in Onan manuals to alert users to the potentially dangerous conditions relating to maintenance of equipment and replacement of parts. Please read and observe.



This symbol warns of immediate hazards which will result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or product or property damage.

PRODUCT SAFETY PRECAUTIONS



Service and repair of Onan equipment must be performed by trained, experienced personnel only. Improper service or repair may result in property damage, severe personal injury or death. Do not use this catalog as a guide to servicing your equipment. Read and follow the IMPORTANT SAFETY INSTRUCTIONS in the Service Manual appropriate for the equipment you are working on.



Contact with USED ENGINE OILS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking or changing engine oils take all necessary precautions not to ingest, breathe the fumes or contact the used oil.



Contact with ASBESTOS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When handling engine gaskets take all necessary precautions not to ingest, breathe or contact the dust from the gaskets! Use adequate ventilation and wear protective gloves, masks and clothing!



Contact with BENZINE and LEAD, found in gasoline, fuel additives and solvents has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking, draining or adding gasoline and fuel additives or using solvents take all necessary precautions not to ingest, breathe the fumes or contact the liquids. Use adequate ventilation and wear protective gloves, masks and protective clothing!

Introduction

This parts catalog applies to the standard generator sets listed below. Parts are arranged in groups of related items and each illustrated part is defined by a reference number corresponding to the same reference number in the parts list. Parts illustrations are typical. Using the model and specification number from your generator set nameplate, select parts that apply to your set. Right and left sides are determined by facing the engine end (front) of the set.

Generator Set Data Table

Model Identification	Rating	Wiring Diagram AC/DC	Voltage	Hertz	Phase
10.0HDCAA/*	10,000 Watts	611–1256	120/240	60	1
12.5HDCAB/*	12,500 Watts	611–1256	120/240	60	1
10.0HDCAC*	10,000 Watts	611–1256	120/240	60	1

* – The specification number denotes customer requested options or deviations from a standard (1A, 1B, etc.) model. The specification letter advances (A, to B, to C, etc.) with major manufacturing changes.

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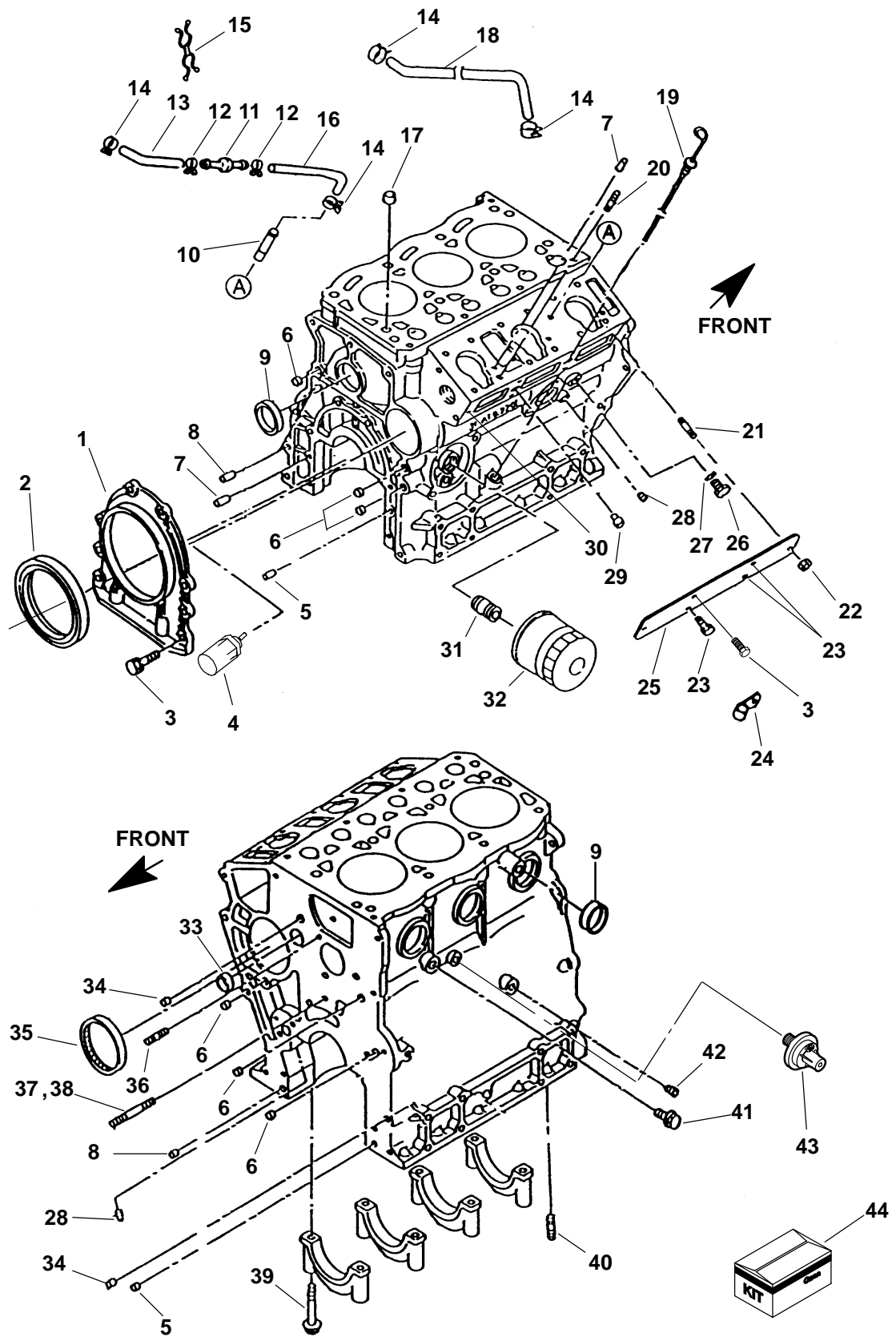
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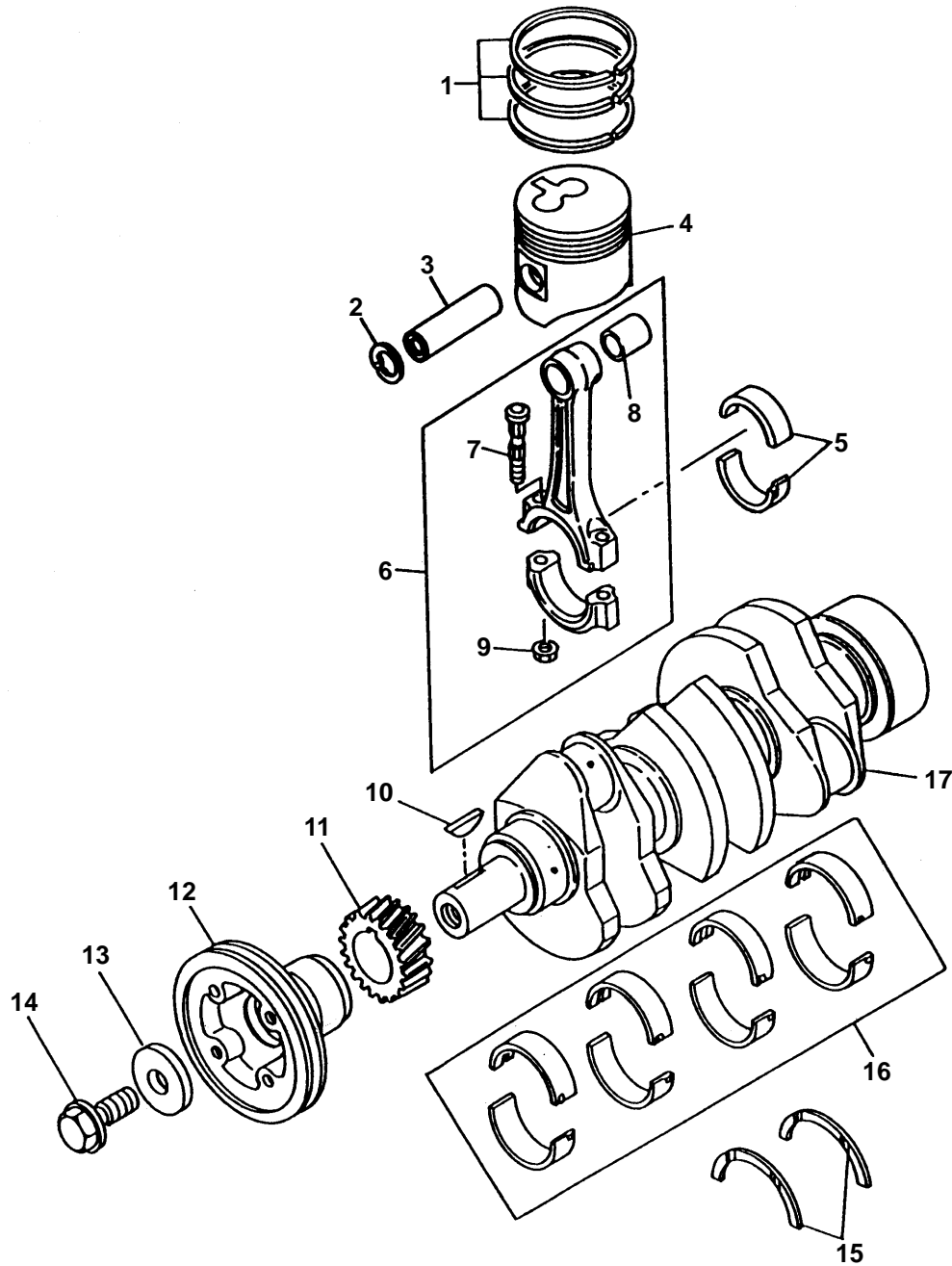
Cylinder Block



Cylinder Block

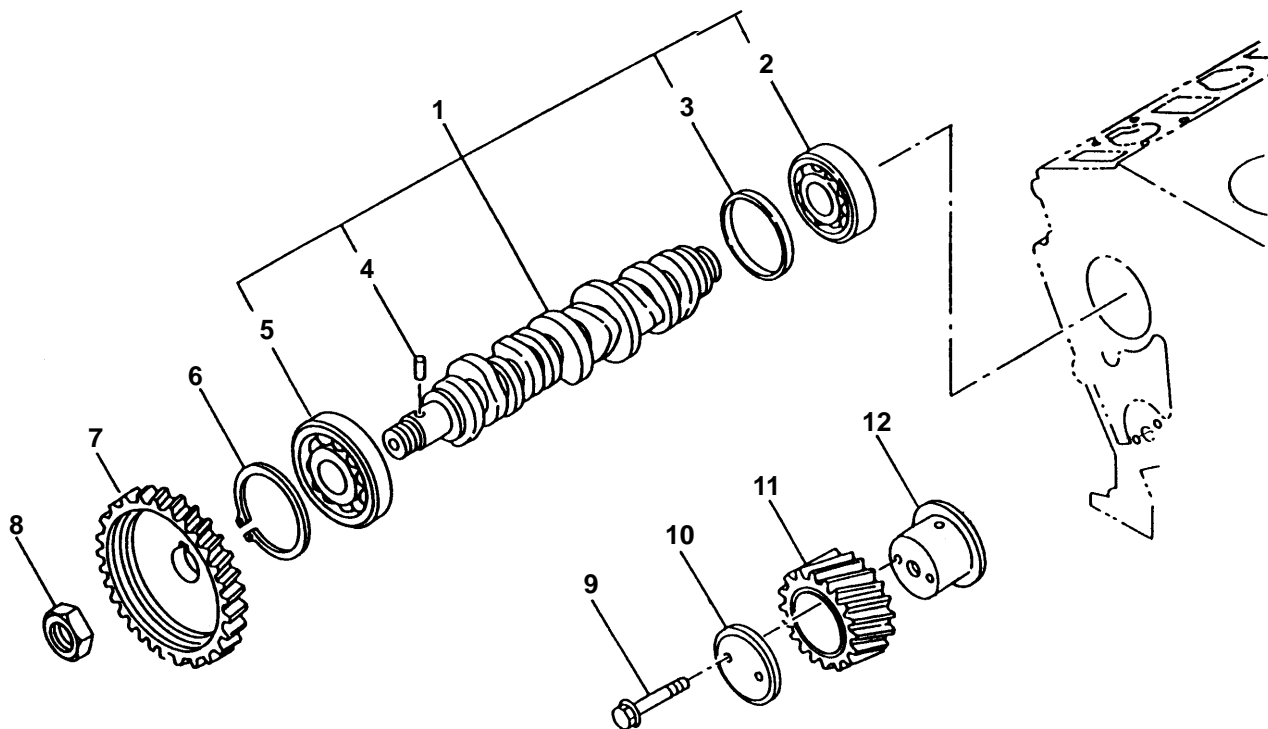
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	100-3432	1	Engine, Replacement	23	187-1002	3	Bolt, Cover
1	187-1196	1	Retainer, Crank Rear	24	187-1331	1	Clip, Fuel Pump Lead Wire
2	187-1042	1	Seal, Crank Rear Oil	25	187-1287	1	Cover, Injection Pump Housing
3	187-1003	7	Bolt	26	187-1039	1	Plug, Cylinder Block (M14)
4	150-2700	1	Actuator (E1)	27	187-1335	1	Gasket, Plug
5	187-1341	2	Dowel, Oil Pump	28	187-1025	2	Plug, Oil Gallery (1/8"PT)
6	187-1038	6	Cup, Sealing (12mm Dia.)	29	187-1190	2	Pin, Control Link
7	187-1316	5	Pin, Straight	30	187-1143	1	Stud, Injection Pump Housing
8	187-1317	2	Pin, Housing Straight				Cover (19mm Lg)
9	187-1286	4	Cup, Sealing (35mm Dia.)	31	187-1140	1	Stud, Oil Filter
10	187-1046	1	Connector, PCV	32	187-1000	1	Filter, Oil
11	187-1134	1	Valve, Check	33	187-1023	1	Cup, Sealing (22mm Dia.)
12	187-1131	2	Clip, Hose	34	187-1341	2	Dowel, Timing Case
13	187-1278	1	Hose, PCV	35	187-1220	1	Bearing, Cam Center Needle
14	187-1043	4	Clip, Hose	36	187-1310	1	Stud, Water Pump (40mm)
15	187-1066	1	Clip, Hose	37	187-1312	1	Stud, Timing Case (60mm)
16	187-1277	1	Hose, PCV	38	187-1311	1	Stud, Timing Case (50mm)
17	187-1126	2	Dowel, Cylinder Head	39	187-1115	8	Bolt, Metal Cap
18	187-1276	1	Hose, PCV	40	187-1307	2	Stud, Oil Pan
19	187-1290	1	Indicator, Oil Level	41	187-1337	1	Plug, Water Drain (1/4"PT)
20	187-1021	6	Stud, Injection Pump (20mm)	42	187-1026	1	Plug, Oil Gallery (1/4" PT)
21	187-1307	1	Stud, Injection Pump Housing	43	185-5492	1	Switch, Oil (S2)
			Cover (16mm Lg)	44	187-1308	1	Kit, Engine Repair (Top
22	187-1018	2	Nut, Cover				Overhaul)

Crankshaft



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1294	3	Ring Set, Piston	7	187-1128	6	Bolt
	187-1217	3	Standard	8	187-1049	3	Bush
2	187-1063	6	Ring, Snap	9	187-1129	6	Nut
3	187-1048	3	Pin, Piston	10	187-1127	1	Key, Woodruff
4			Piston	11	187-1163	1	Gear, Crankshaft
	187-1272	3	Standard	12	187-1247	1	Pulley, Crankshaft
	187-1202	3	0.25 Oversize)	13	187-1113	1	Washer
5	187-1114	3	Bearing Set	14	187-1147	1	Bolt
6	187-1218	3	Rod, Connecting (Includes Bolts, Bush and Nuts)	15	187-1047	2	Washer, Thrust
				16	187-1216	1	Washer Kit, Standard Thrust
				17	187-1195	1	Crankshaft

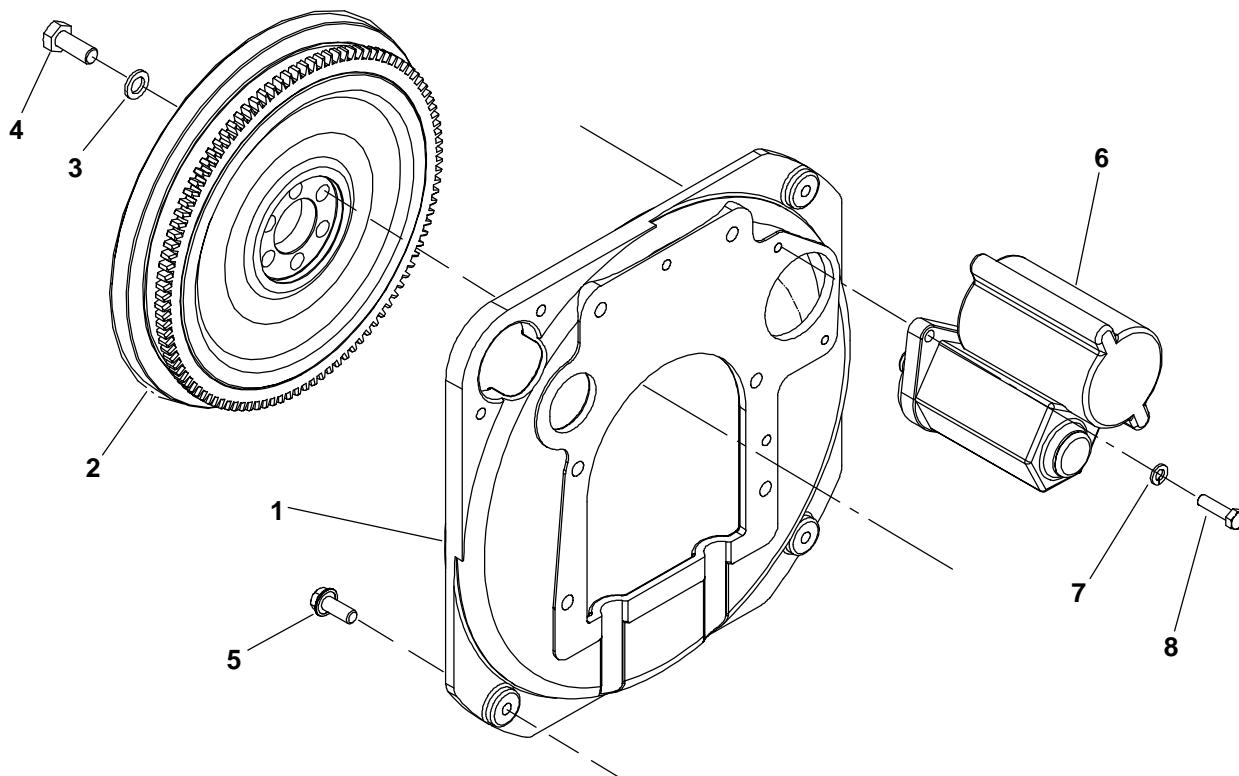
Camshaft/Idle Gear



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1228	1	Camshaft Assy (Includes Parts Marked *)	8	187-1035	1	Nut, Cam Gear
2	187-1304	1	*Bearing, Rear Ball	9	187-1016	2	Bolt
3	187-1227	1	*Ring, Camshaft Wear	10	187-1050	1	Collar, Thrust
4	187-1339	1	*Pin	11	187-1300	1	Gear, Idle (with Bush)
5	187-1303	1	*Bearing, Front Ball	12	187-1299	1	Shaft, Idle Gear
6	187-1238	1	Ring, Snap				
7	187-1273	1	Gear, Injection Pump & Valve				

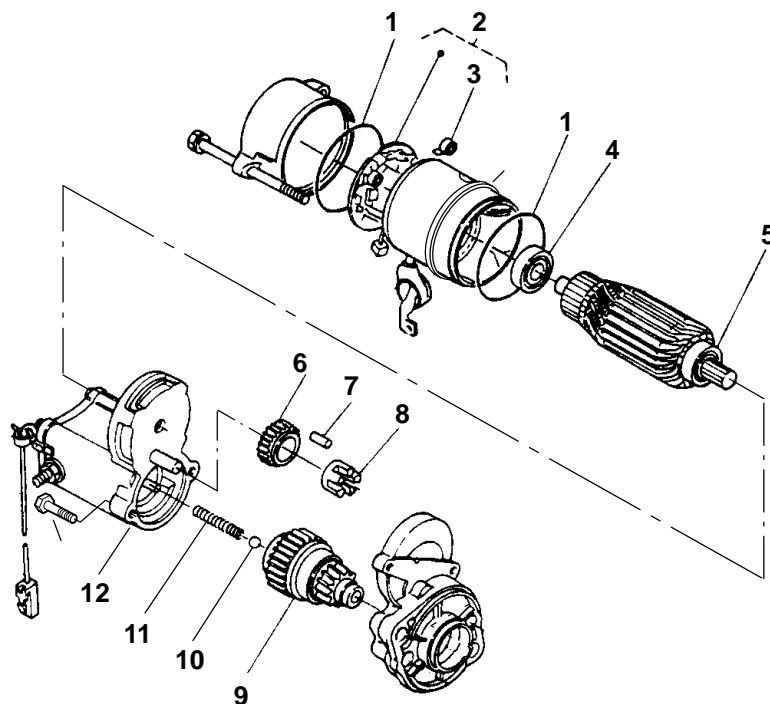
* – Parts Included in Camshaft Assy.

Flywheel



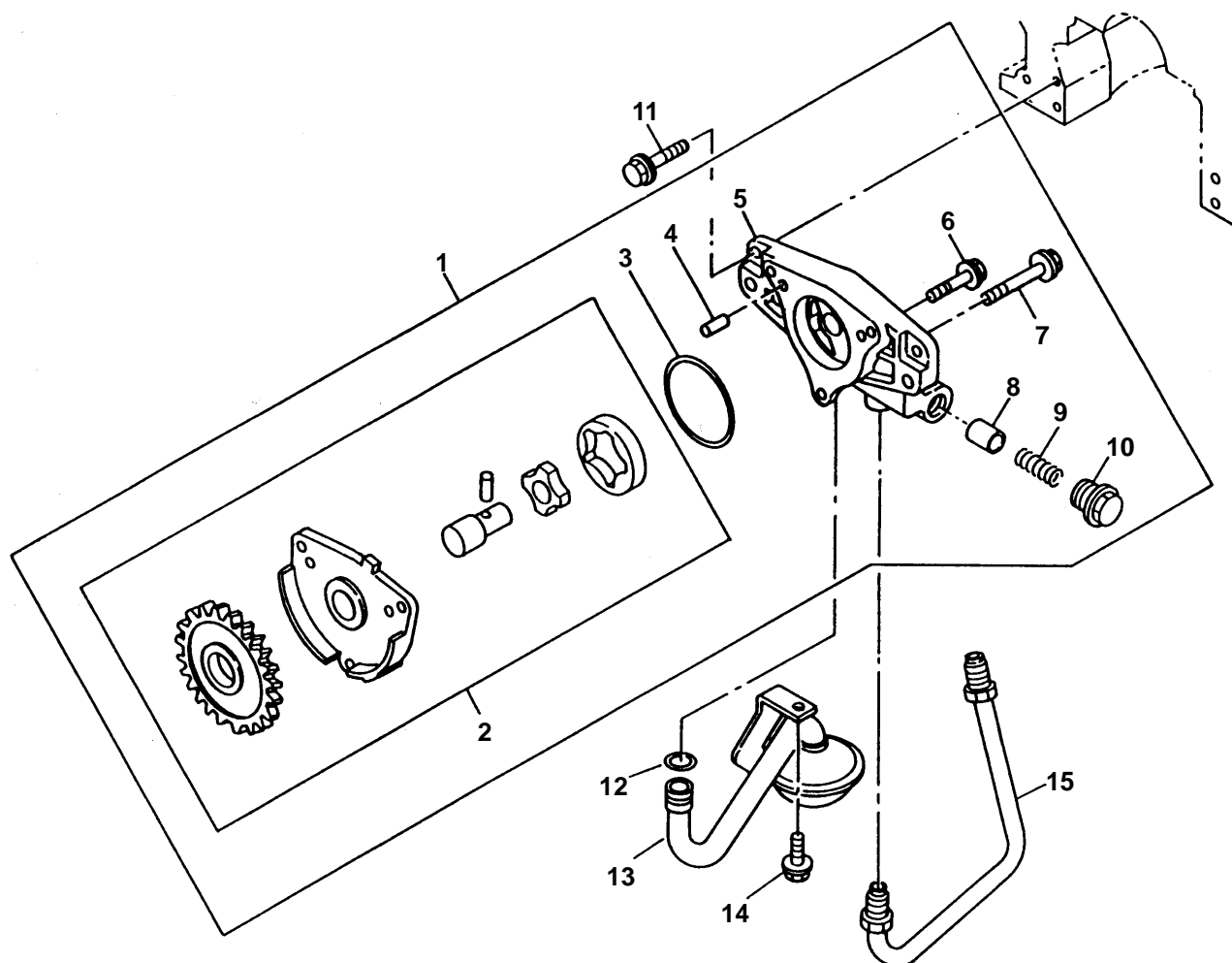
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	104-1934	1	Housing, Flywheel	6	191-2229	1	Starter (See Separate Page for Components)
2	104-1936	1	Flywheel	7	850-2008	2	Washer, Lock (M8)
3	187-1158	6	Washer	8	800-2515	2	Screw, Hex Head Cap (M8 x 1.25 x 30mm)
4	187-1112	6	Bolt				
5	821-2061	6	Screw, Lock Head Flange (M10 x 1.5 x 25mm)				

Starter Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	191-2229	1	Starter	6	191-2250	1	Pinion, Starter
1	191-2239	1	O'Ring	7	191-2252	1	Roller, Clutch
2	191-2247	1	Holder Assy, Starter (Includes Spring)	8	191-2251	1	Retainer
3	191-2246	1	Spring, Starter	9	191-2253	1	Clutch, Starter
4	191-2255	1	Bearing, Ball	10	191-2241	1	Ball, Steel
5	191-2254	1	Bearing, Ball	11	191-2240	1	Spring, Return
				12	191-2245	1	Switch, Magnetic

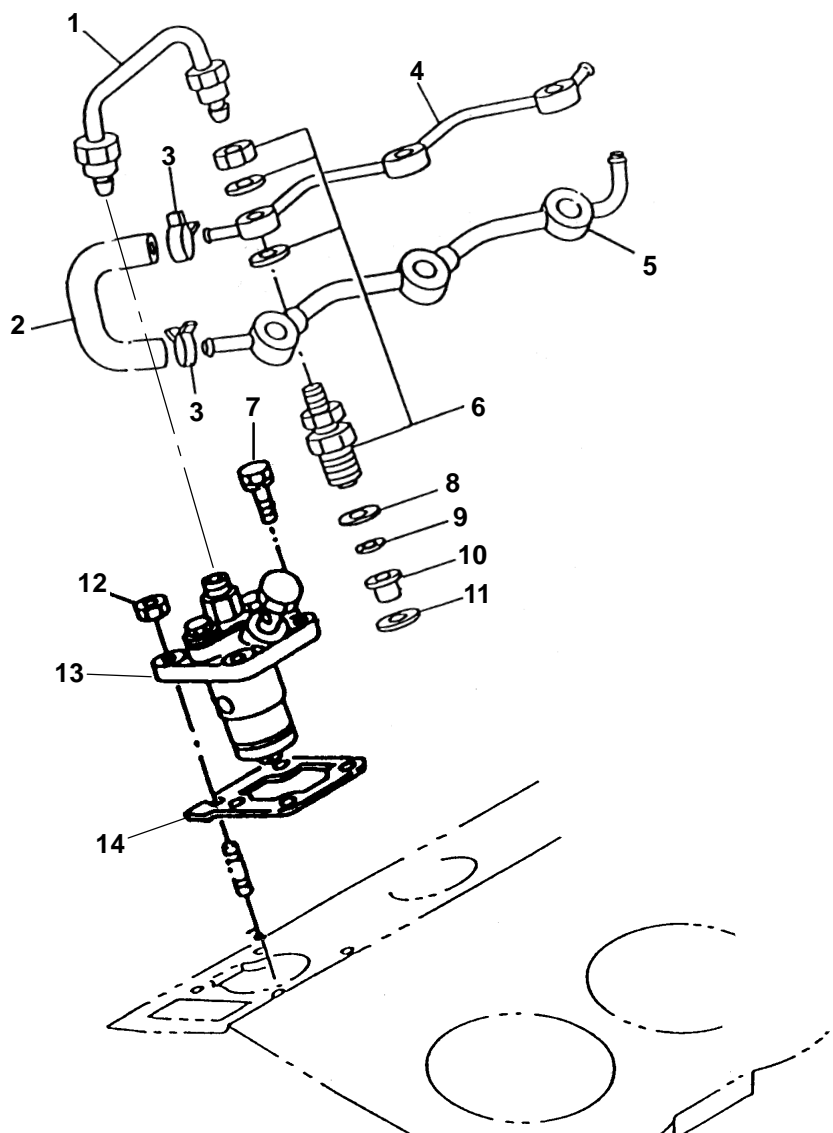
Oil Pump



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1222	1	Pump Assy, Oil (Includes Parts Marked *)	10	187-1058	1	*Plug, Valve
2	187-1197	1	*Pump, Oil	11	187-1009	4	Bolt
3	187-1291	1	*O'Ring, Oil Pump	12	187-1029	1	O'Ring, Strainer
4	187-1316	2	*Pin, Oil Pump	13	187-1204	1	Strainer, Oil
5	187-1223	1	*Body, Oil Pump	14	187-1007	1	Bolt
6	187-1005	2	*Bolt	15	187-1205	1	Pipe, Oil
7	187-1006	1	*Bolt				
8	187-1130	1	*Valve, Relief				
9	187-1293	1	*Spring, Valve				

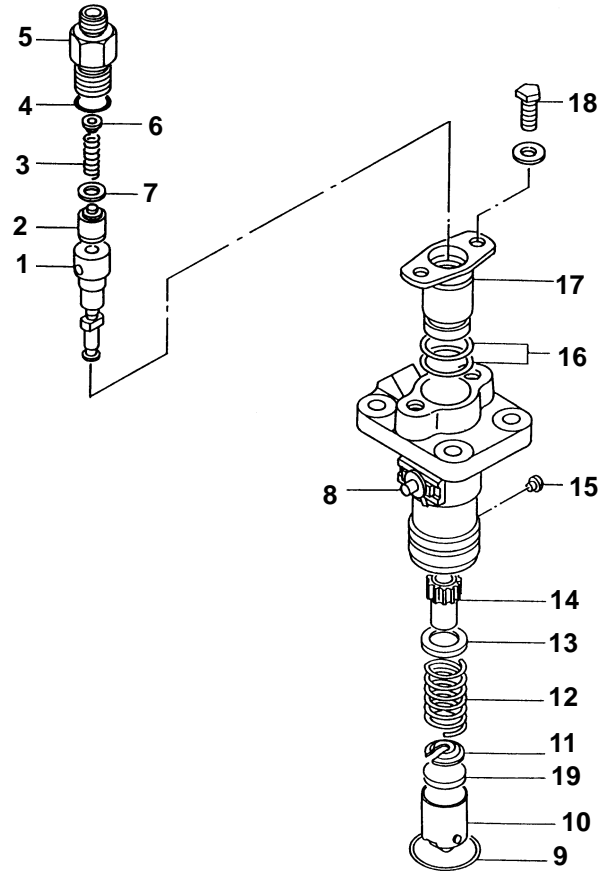
* - Parts Included in Oil Pump Assy.

Injection Pump



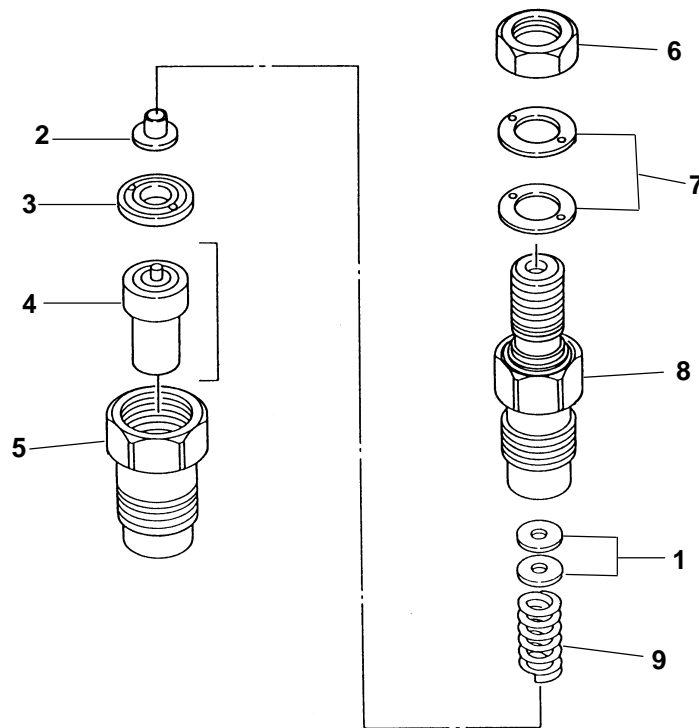
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1208	3	Pipe, Injection	13	187-1162	3	Pump Assy, Injection (See Separate Page for Components)
2	187-1215	1	Hose, Fuel Feed Leakoff	14			Shim, Injection Pump
3	187-1043	2	Clip, Fuel Hose		187-1166	AR	0.2mm
4	187-1210	1	Pipe, Fuel Leakoff		187-1167	AR	0.3mm
5	187-1270	1	Pipe, Fuel Feed		187-1168	AR	0.4mm
6	187-1249	3	Nozzle Assy, Injection (See Separate Page for Components)		187-1169	AR	0.5mm
7	187-1010	6	Bolt		187-1170	AR	0.6mm
8	187-1136	3	Gasket, Nozzle Holder		187-1171	AR	0.7mm
9	187-1060	3	Washer, Corrugated		187-1172	AR	0.8mm
10	187-1061	3	Shield, Nozzle Heat		187-1173	AR	1.0mm
11	187-1137	3	Gasket, Heat Shield		187-1174	AR	1.2mm
12	187-1019	6	Nut				

Injection Pump Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	187-1162	1	Pump, Injection		187-1081	AR	2.90
1	187-1302	3	Plunger		187-1082	AR	2.95
2	187-1253	3	Valve, Delivery		187-1083	AR	3.00
3	187-1067	3	Spring, Delivery		187-1084	AR	3.05
4	187-1069	3	O'Ring		187-1085	AR	3.10
5	187-1110	3	Holder, Delivery		187-1086	AR	3.15
6	187-1254	3	Seat, Spring		187-1087	AR	3.20
7	187-1068	3	Gasket		187-1088	AR	3.25
8	187-1258	3	Rack, Control		187-1089	AR	3.30
9	187-1257	3	Ring, Snap		187-1090	AR	3.35
10	187-1070	3	Tappet		187-1091	AR	3.40
11	187-1073	3	Seat, Spring (Lower)		187-1092	AR	3.45
12	187-1071	3	Spring, Plunger		187-1093	AR	3.50
13	187-1072	3	Seat, Spring (Upper)		187-1094	AR	3.55
14	187-1074	3	Sleeve, Control		187-1095	AR	3.60
15	187-1256	3	Pin		187-1096	AR	3.65
16	187-1146	6	O'Ring		187-1097	AR	3.70
17	187-1255	3	Sleeve, Flange		187-1098	AR	3.75
18	187-1145	6	Bolt		187-1199	AR	3.80
19			Plate		187-1100	AR	3.85
	187-1075	AR	2.60		187-1101	AR	3.90
	187-1076	AR	2.65		187-1102	AR	3.95
	187-1077	AR	2.70		187-1103	AR	4.00
	187-1078	AR	2.75		187-1104	AR	4.05
	187-1079	AR	2.80		187-1105	AR	4.10
	187-1080	AR	2.85				

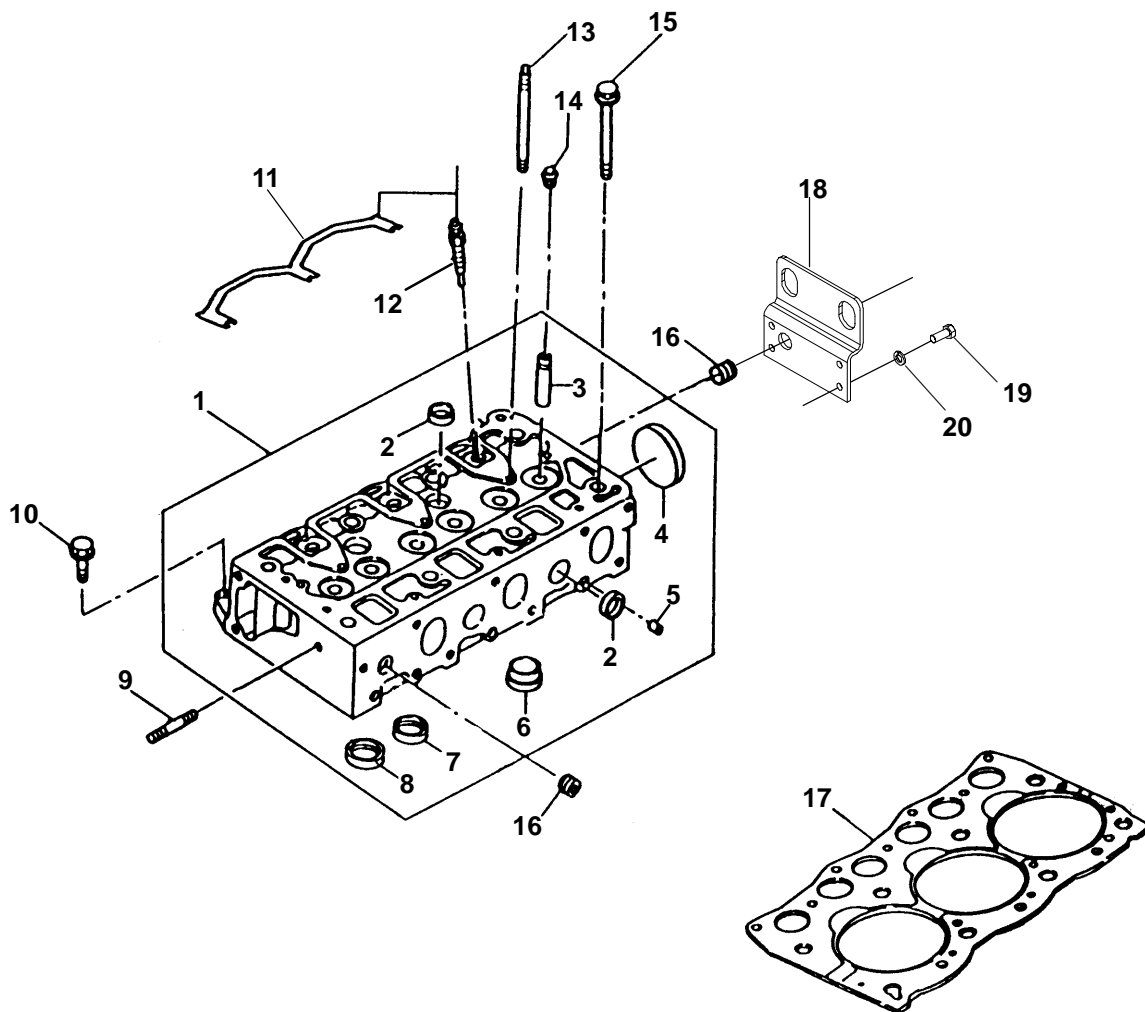
Injection Nozzle Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1249	3	Nozzle, Injection Shim
	187-1116	AR	0.1
	187-1117	AR	0.2
	187-1125	AR	0.3
	187-1118	AR	0.4
	187-1119	AR	0.5
	187-1120	AR	0.52
	187-1121	AR	0.54
	187-1122	AR	0.56
	187-1123	AR	0.58
	187-1124	AR	0.8

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	187-1106	3	Seat, Spring
3	187-1259	3	Spacer
4	187-1346	3	Nozzle
5	187-1264	3	Nut, Retaining
6	187-1108	3	Nut
7	187-1059	6	Gasket
8	NFS	3	Body, Nozzle Holder
9	187-1107	3	Spring, Nozzle

Cyinder Head

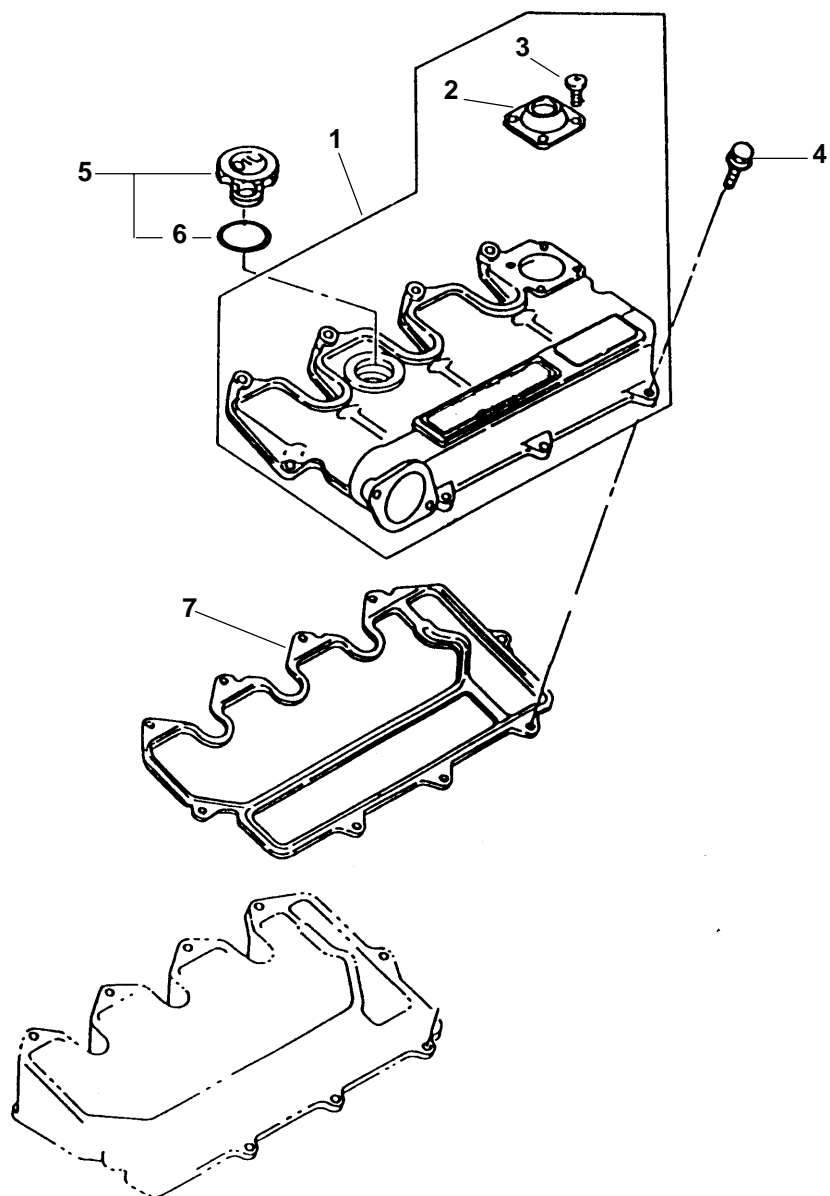


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1274	1	Head Assy, Cylinder (Includes Parts Marked *)
2	187-1023	4	*Cup, Sealing (22mm Dia.)
3	187-1159	6	*Guide, Valve
4	187-1022	1	*Cup, Sealing (44.5mm Dia)
5	187-1044	4	*Plug, Drilled (8mm Dia.)
6	187-1226	3	*Plug, Hot
7	187-1199	3	*Seat, Inlet Insert Valve
8	187-1200	3	*Seat, Exhaust Insert Valve
9	187-1310	1	Stud, Water Pump
10	187-1152	4	Bolt, Cylinder Head
11	187-1212	1	Cord, Glow Plug
12	187-1289	3	Plug, Glow (HR1)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
13	187-1269	5	Stud, Rocker Bracket
14	187-1062	6	Seal, Valve
15	187-1185	8	Bolt, Cylinder Head
16	187-1040	2	Plug, Heater Switch (3/8"PT)
17	187-1201	1	Gasket, Cylinder Head
18	403-4209-02	1	Bracket, Lifting
19	800-2057	4	Screw, Hex Head Cap (M8 x 1.25 x 25mm)
20	850-2008	4	Washer, Lock (M8)

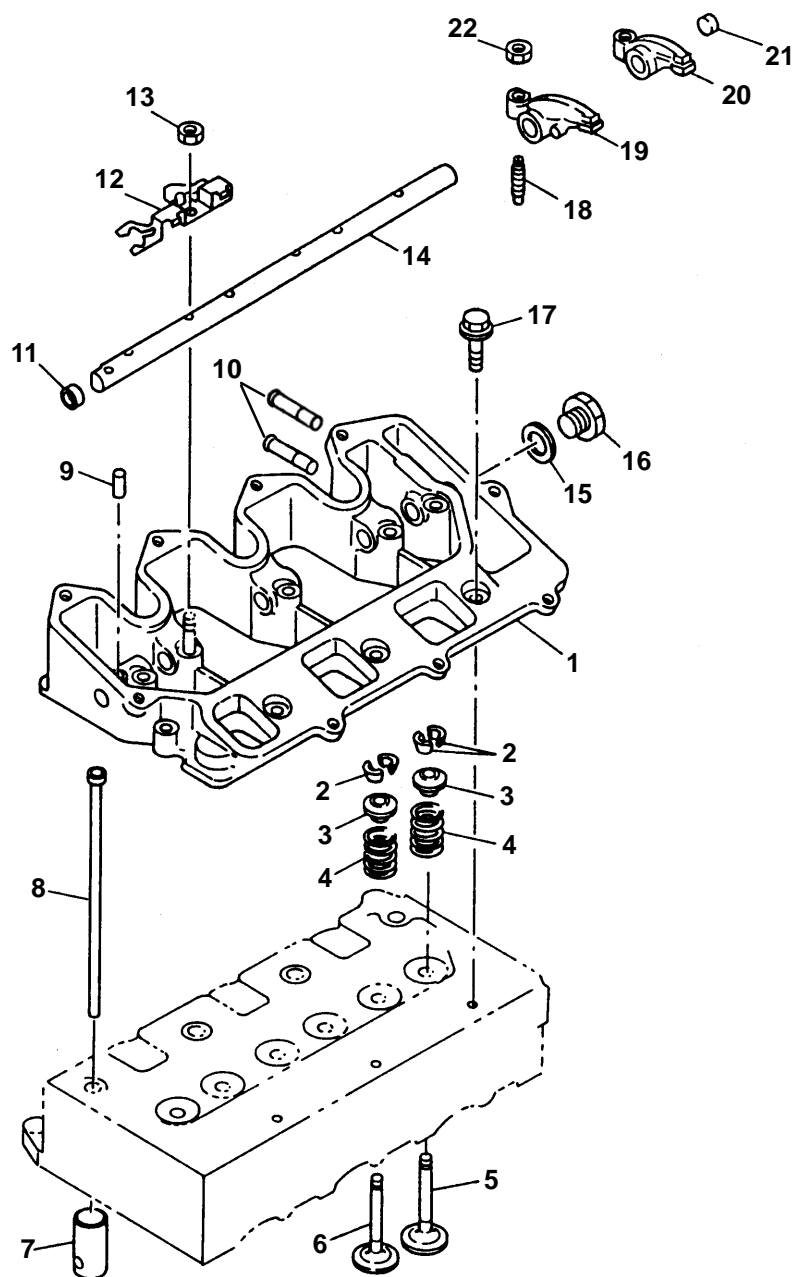
* - Parts Included in Cylinder Head Assy.

Cylinder Head Cover



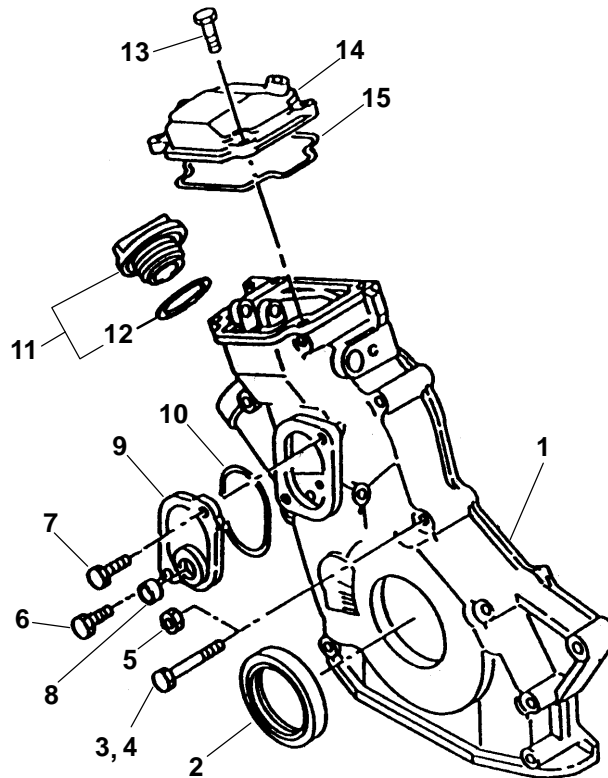
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1237	1	Cover Assy, Cylinder Head (Includes Ventilator Valve and Screws)	4	187-1003	9	Bolt, Cylinder Head Cover
2	187-1142	1	Valve, Ventilator	5	187-1111	1	Cap Assy, Oil Fill (Includes Gasket)
3	187-1305	4	Screw, Valve	6	187-1065	1	Gasket, Oil Fill Cap
				7	187-1240	1	Gasket, Cylinder Head Cover

Rocker Arm



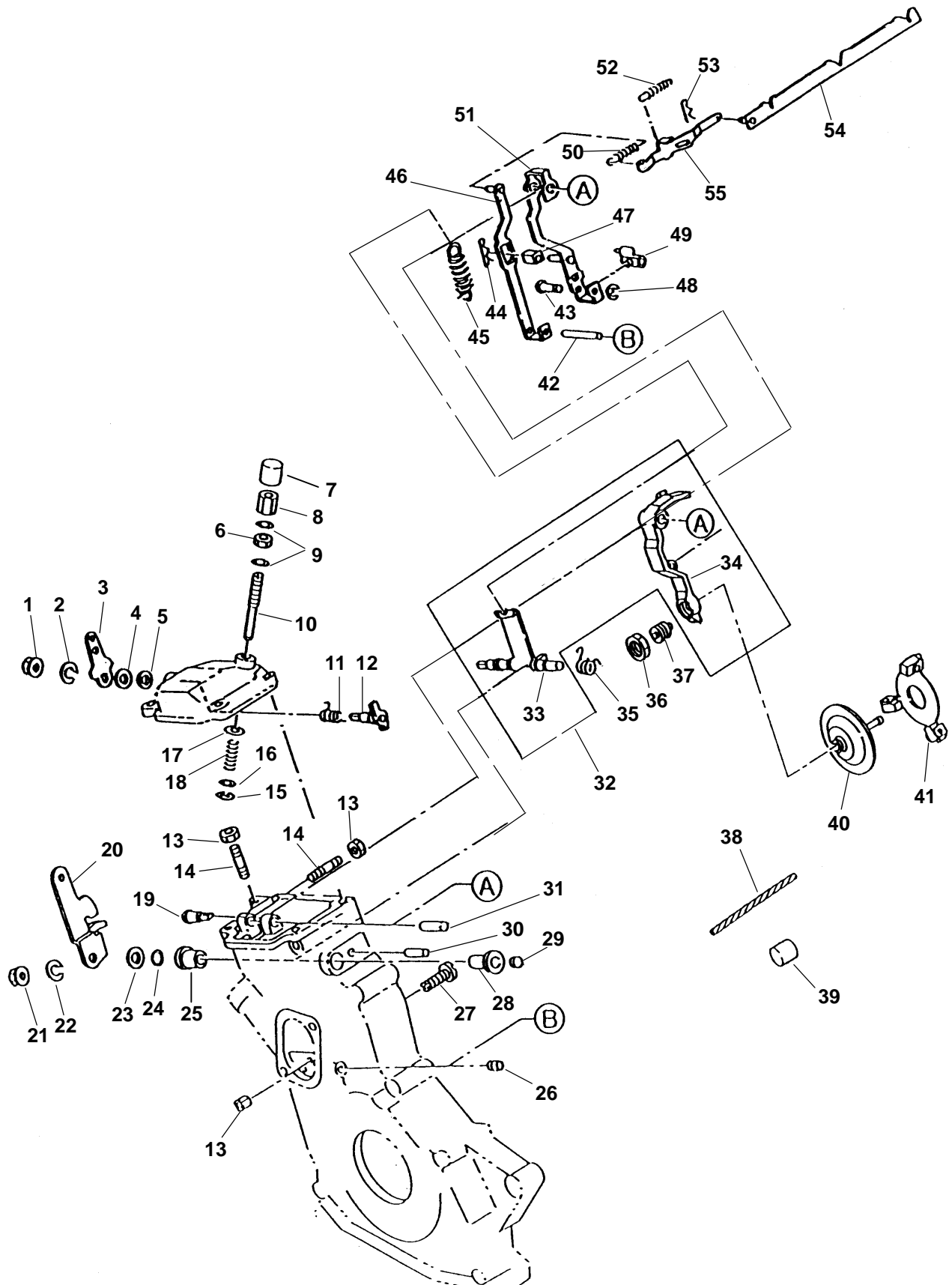
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1301	1	Bracket, Rocker	12	187-1239	3	Spring, Rocker
2	187-1132	12	Collar, Split	13	187-1018	5	Nut, Rocker Bracket
3	187-1135	6	Seat, Valve Spring	14	187-1238	1	Shaft, Rocker
4	187-1175	6	Spring, Valve	15	187-1334	1	Gasket, Plug
5	187-1211	3	Valve, Exhaust	16	187-1343	1	Plug, Rocker Shaft
6	187-1271	3	Valve, Inlet	17	187-1004	4	Bolt
7	187-1297	6	Tappet	18	187-1153	6	Screw
8	187-1233	6	Rod, Push	19	187-1295	3	Arm, Rocker (Inlet)
9	187-1338	1	Pin	20	187-1296	3	Arm, Rocker (Exhaust)
10	187-1198	2	Pipe	21	187-1191	1	Cup, Sealing (8mm)
11	187-1340	1	Cup, Sealing (12mm)	22	187-1322	6	Nut

Gearcase



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1267	1	Gearcase	9	187-1189	1	Cover, Gearcase
2	187-1041	1	Seal, Crankshaft Front Oil	10	187-1332	1	O'Ring, Gearcase Cover
3	187-1016	6	Bolt, Timing Case	11	187-1149	1	Cap Assy, Oil Fill (Includes Gasket)
4	187-1014	2	Bolt, Timing Case	12	187-1065	1	Gasket, Oil Fill Cap
5	187-1019	2	Nut, Timing Case	13	187-1003	4	Bolt, Cover
6	187-1243	1	Bolt, W/ Detent Hole	14	187-1275	1	Cover, Governor Lever
7	187-1002	1	Bolt, Cover	15	187-1229	1	Gasket, Governor Lever Cover
8	187-1045	1	Cup, Sealing (16mm Dia.)				

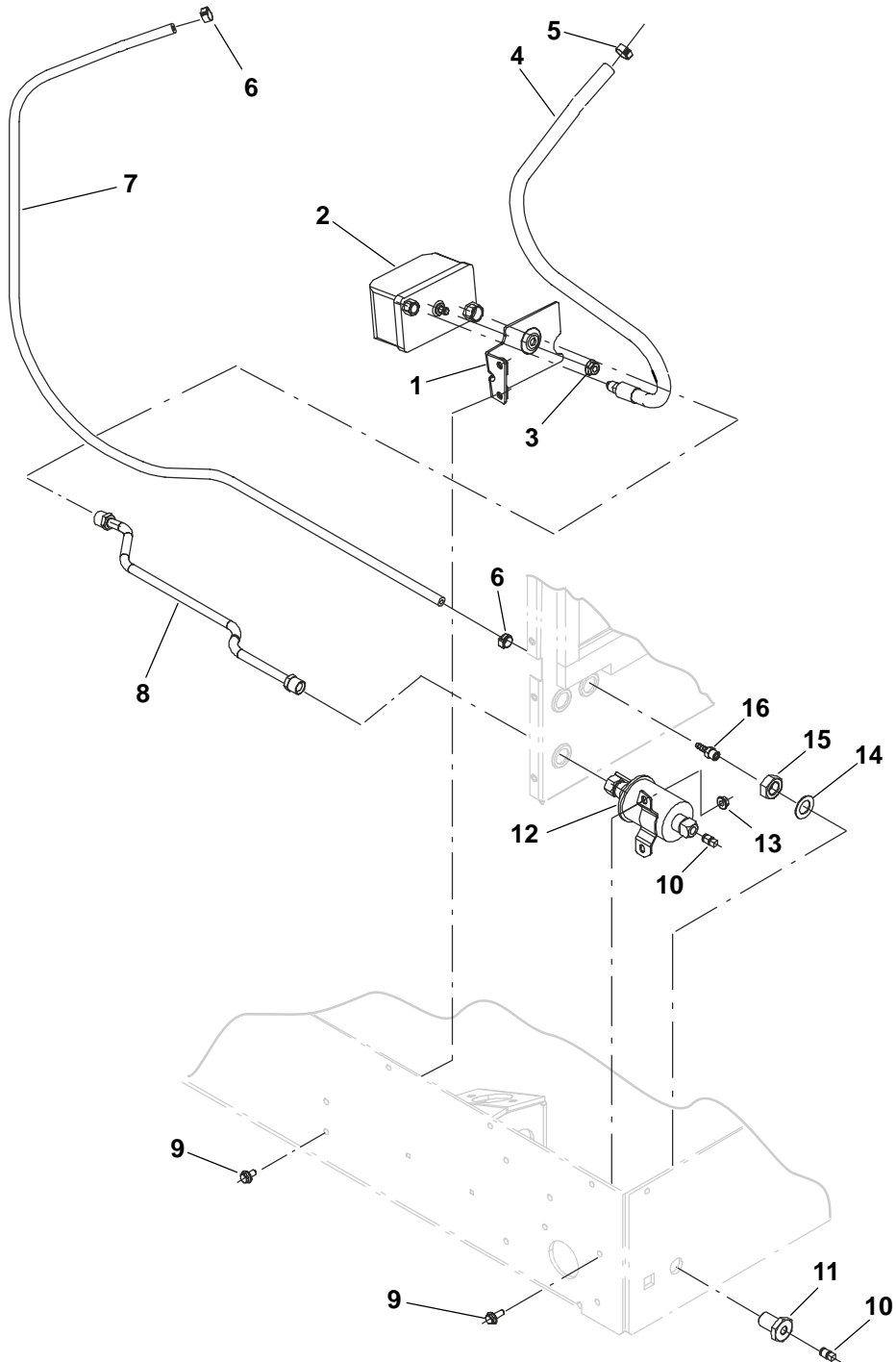
Governor



Governor

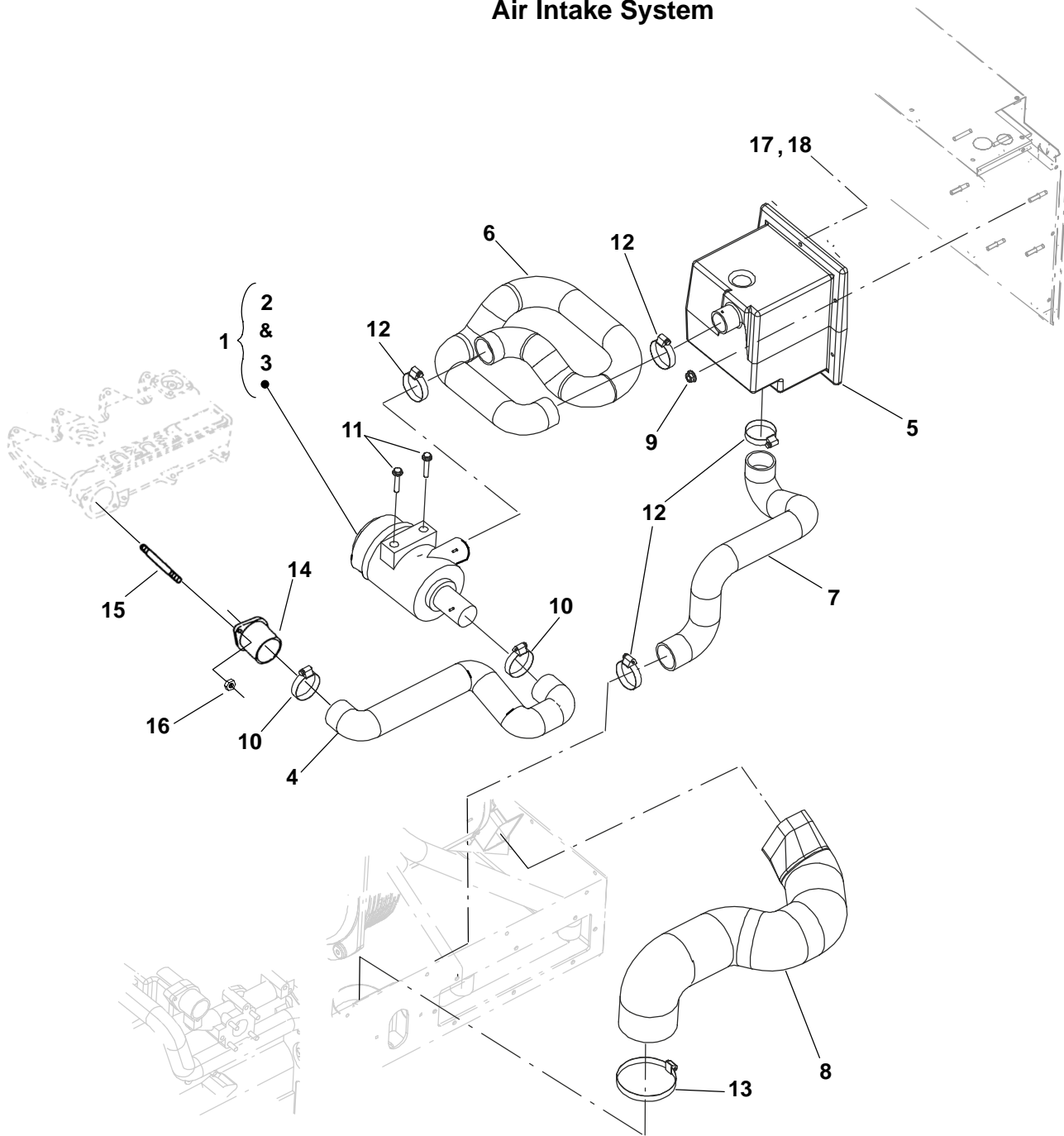
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1321	1	Nut, Shaft Lever	30	187-1313	1	Pin, Control Spring
2	187-1324	1	Washer, Spring	31	187-1318	1	Shaft, Lever
3	187-1156	1	Lever, Fuel Cut	32	187-1268	1	Lever Kit, Governor (Includes Main Spring Lever and Tension Lever)
4	187-1037	1	Washer, Thrust				
5	187-1031	1	O'Ring, Shaft				
6	187-1322	1	Nut, Set Screw	33	187-1182	1	Lever, Main Spring
7	187-1052	1	Cap, Idle Set	34	187-1178	1	Lever, Governor Tension
8	187-1034	1	Nut, Set Screw Cap	35	187-1157	1	Spring, Return
9	187-1036	2	Gasket, Set Screw	36	187-1109	1	Nut, Holder
10	187-1154	1	Screw, Idle Spring Set	37	187-1057	1	Angleich Kit
11	187-1192	1	Spring, Fuel Cut Return	38	187-1342	2	Wire, Lead Seal
12	187-1155	1	Shaft, Fuel Cut	39	187-1032	2	Seal, Lead
13	187-1322	3	Nut, Screw	40	187-1266	1	Sleeve
14	187-1138	2	Screw, Speed Set Control	41	187-1213	1	Flyweight
15	187-1329	1	Ring, Idle Spring Snap	42	187-1315	1	Shaft, Floating Lever
16	187-1325	1	Washer, Idle Spring Lower	43	187-1319	1	Shaft, Shifter
17	187-1327	1	Washer, Idle Spring Upper	44	187-1030	1	Pin, Governor Lever Sprit
18	187-1250	1	Spring, Idle	45	187-1234	1	Spring, Main
19	187-1053	1	Eye, Start Spring	46	187-1251	1	Lever, Floating
20	187-1225	1	Lever, Governor Control	47	187-1292	1	Piece, Governor Lever Guide Pin
21	187-1321	1	Nut, Lever to Shaft				
22	187-1324	1	Washer, Spring	48	187-1330	1	Ring, Snap
23	187-1037	1	Washer, Thrust	49	187-1179	1	Shifter, Governor
24	187-1031	1	O'Ring, Control Shaft	50	187-1262	1	Spring, Set
25	187-1144	1	Bush, Main Spring Lever	51	187-1164	1	Lever, Guide
26	187-1026	1	Plug, Shaft (1/8"PT)	52	187-1183	1	Spring, Start
27	187-1193	1	Screw, Full Load Set	53	187-1030	1	Pin, Link Plate Snap
28	187-1188	1	Bush, Main Spring Lever	54	187-1288	1	Link, Control
29	187-1150	1	Cup, Bush Sealing (10mm Dia.)	55	187-1180	1	Plate, Lever Pump Link

Fuel System



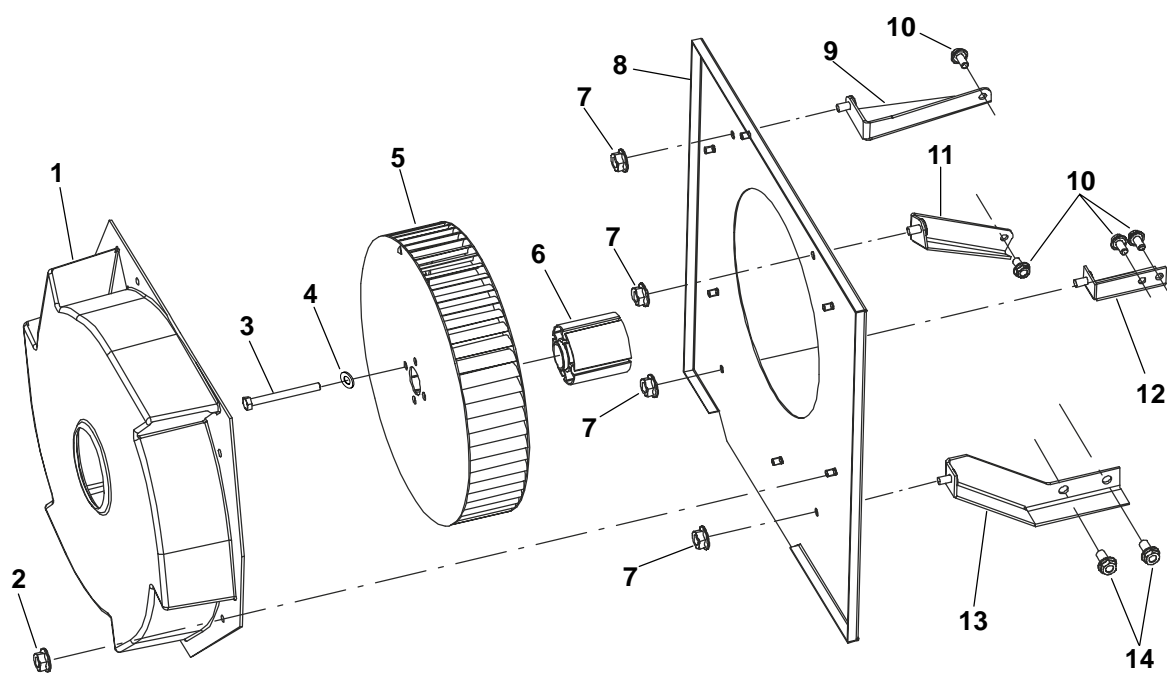
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	149-2585-04	1	Bracket, Fuel Filter	10	517-0273	2	Plug, Pipe
2	149-2513	1	Filter, Fuel	11	502-1296-02	1	Fitting, Bulkhead
3	870-2057	1	Nut, Self Locking (M6 x 1)	12	149-2583	1	Pump, Fuel (E2)
4	149-2580-01	1	Line, Fuel Injection Pump	13	870-2054	2	Nut, Lock Flange
5	503-0170	1	Clamp, Hose	14	854-0028	1	Washer, IT Lock (5/8")
6	503-0685	2	Clamp, Hose	15	868-0007	1	Nut, Hex Jam (5/8-18)
7	503-2078	1	Line, Fuel	16	502-1299	1	Connector, Hose
8	149-2605	1	Line, Fuel Filter				
9	821-2096-02	4	Screw, Lock Flange				

Air Intake System



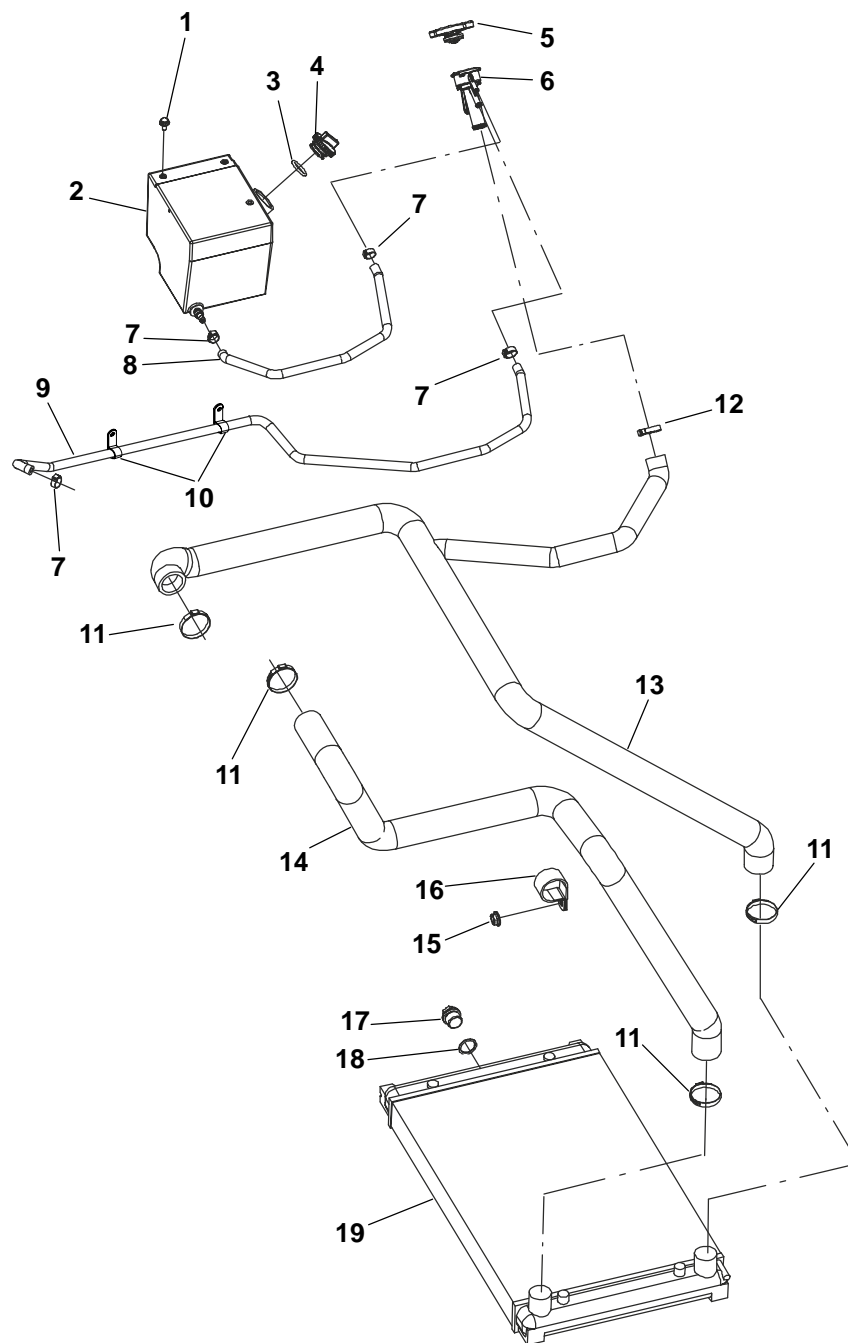
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	140-3050	1	Cleaner Assy, Air (Includes Element and Cover)	11	821-2097-06	2	Screw, Lock Flange (M8 x 1.25 x 45mm)
2	140-3071	1	Element, Air Cleaner	12	503-1140	4	Band, Hose Clamp
3	140-3072	1	Cover, Air Cleaner	13	503-1148	1	Band, Hose Clamp
4	503-2053	1	Hose, Intake	14	187-1165	1	Pipe, Air Inlet
5	134-5183	1	Resonator, Intake	15	187-1307	2	Stud, Inlet Pipe
6	503-2054-02	1	Hose, Intake	16	187-1018	2	Nut, Inlet Pipe
7	503-2054-01	1	Hose, Intake	17	305-0953-03	1	Control
8	211-0484-01	1	Tube, Air Intake	18	823-0002-06	3	Screw, Pan Head Machine (M4 x 0.75 x 12mm)
9	870-2054	6	Nut, Lock Flange (M6 x 1)				
10	503-0365	2	Band, Hose Clamp				

Fan Mounting



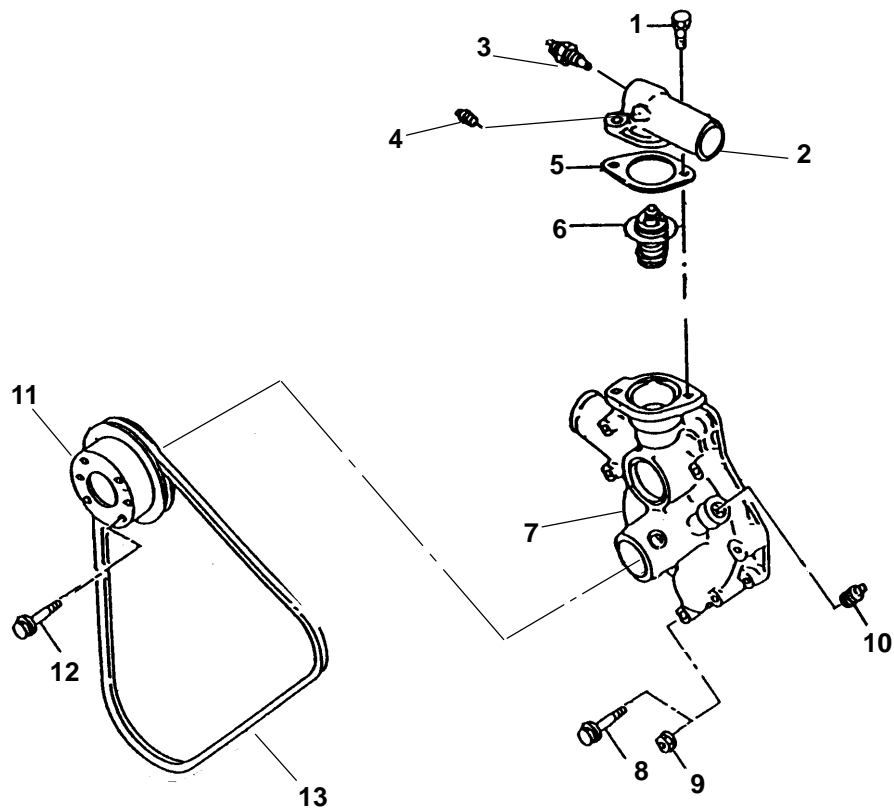
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	130-4760	1	Scroll, Fan	9	130-4824-02	1	Bracket, Backplate
2	870-2054	6	Nut, Lock Flange (M6 x 1)	10	821-2045	4	Screw, Lock Flange (M8 x 1.25 x 16mm)
3	800-2069	4	Screw, Hex Head Cap (M8 x 1.25 x 80mm)	11	130-4745-02	1	Bracket, Backplate
4	526-2100	4	Washer, Flat (M8)	12	130-4825-02	1	Bracket, Backplate
5	130-4748	1	Fan, Sucker	13	130-4826-02	1	Bracket, Backplate
6	130-1876	1	Spacer, Fan	14	821-2060	2	Screw, Lock Flange (M10 x 1.5 x 20mm)
7	870-2055	4	Nut, Lock Flange (M8 x 1.25mm)				
8	130-4742-02	1	Backplate, Fan				

Cooling System



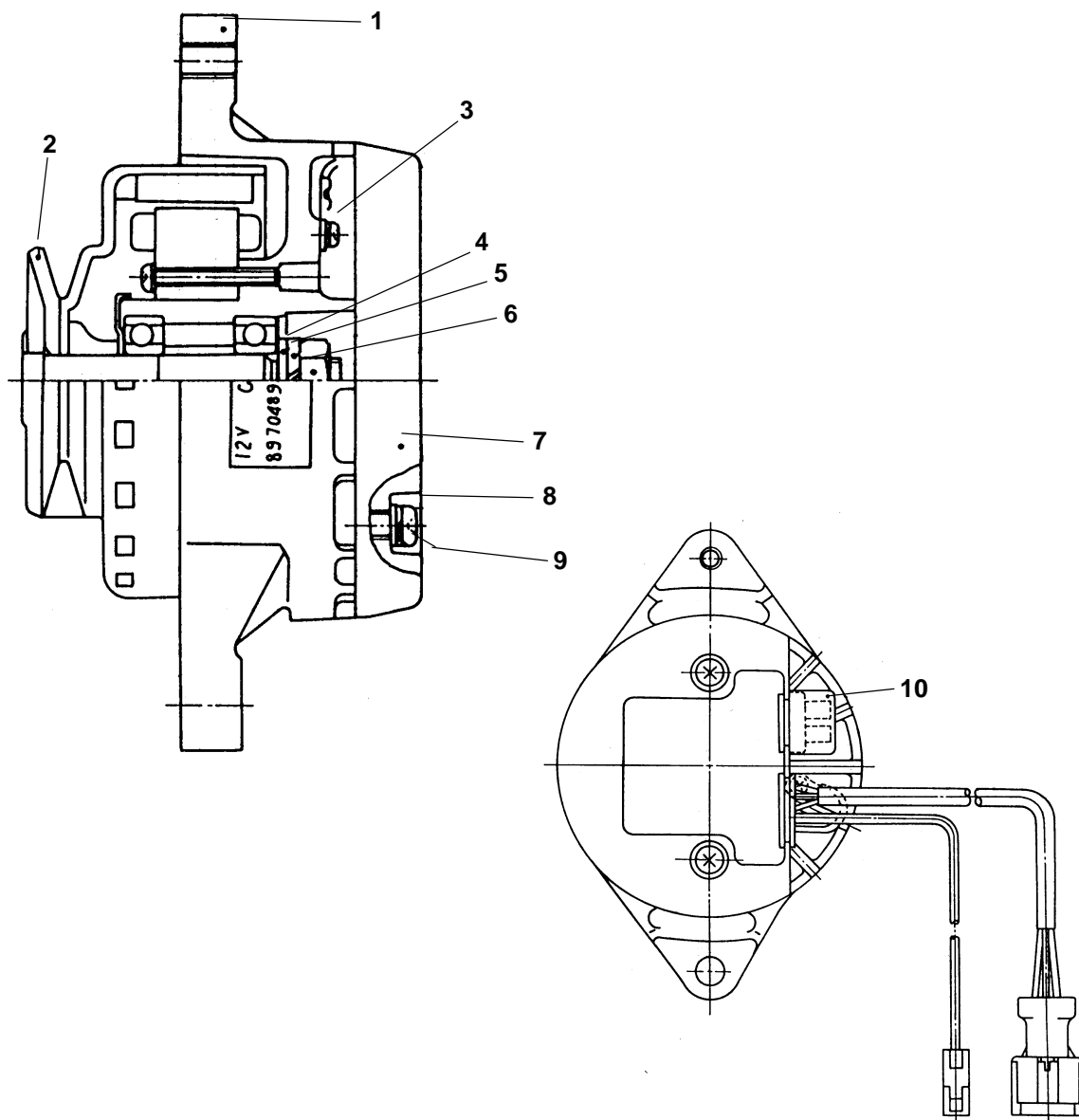
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-2096-02	3	Screw, Lock Flange (M6 x 1 x 12mm)	11	503-1138	4	Clamp, Hose
2	130-4322-01	1	Tank, Recovery	12	503-0189	1	Clamp, Hose
3	509-0329	1	O'Ring	13	503-2056	1	Hose, Engine (In)
4	130-4450-02	1	Cap, Push-On	14	503-2055	1	Hose, Engine (Out)
5	130-4320	1	Cap, Fill	15	870-2056	1	Nut, Lock Flange (M10 x 1.5mm)
6	130-4321	1	Neck, Fill	16	332-2898	1	Clamp, Loop
7	503-0170	4	Clamp, Hose	17	870-0553	1	Plug, Hex Head Screw
8	503-2059	1	Hose, Overflow	18	509-0347	1	O'Ring
9	503-2060	1	Hose, Air Bleed	19	130-4722	1	Radiator
10	332-1554	2	Clamp, Hose				

Water Pump



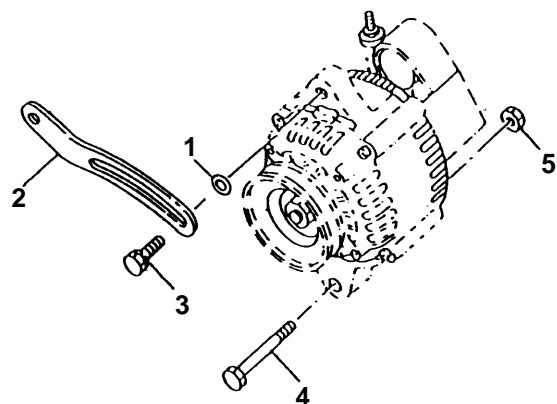
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1010	1	Bolt	9	187-1019	2	Nut
2	187-1280	1	Pipe, Water Outlet	10	187-1040	1	Plug, Heater (PT 3/8)
3	193-0318	1	Sender, Water Temperature (E3)	11	187-1187	1	Pulley, Fan
4	502-1306	1	Connector, Hose	12	187-1001	2	Bolt, Pulley
5	187-1141	1	Gasket, Outlet Pipe	13	187-1232	1	Belt, Cooling Fan (836mm)
6	187-1139	1	Thermostat				
7	187-1298	1	Pump, Water				
8			Bolt				
	187-1011	1	45mm				
	187-1016	2	60mm				
	187-1010	2	40mm				

Alternator Components



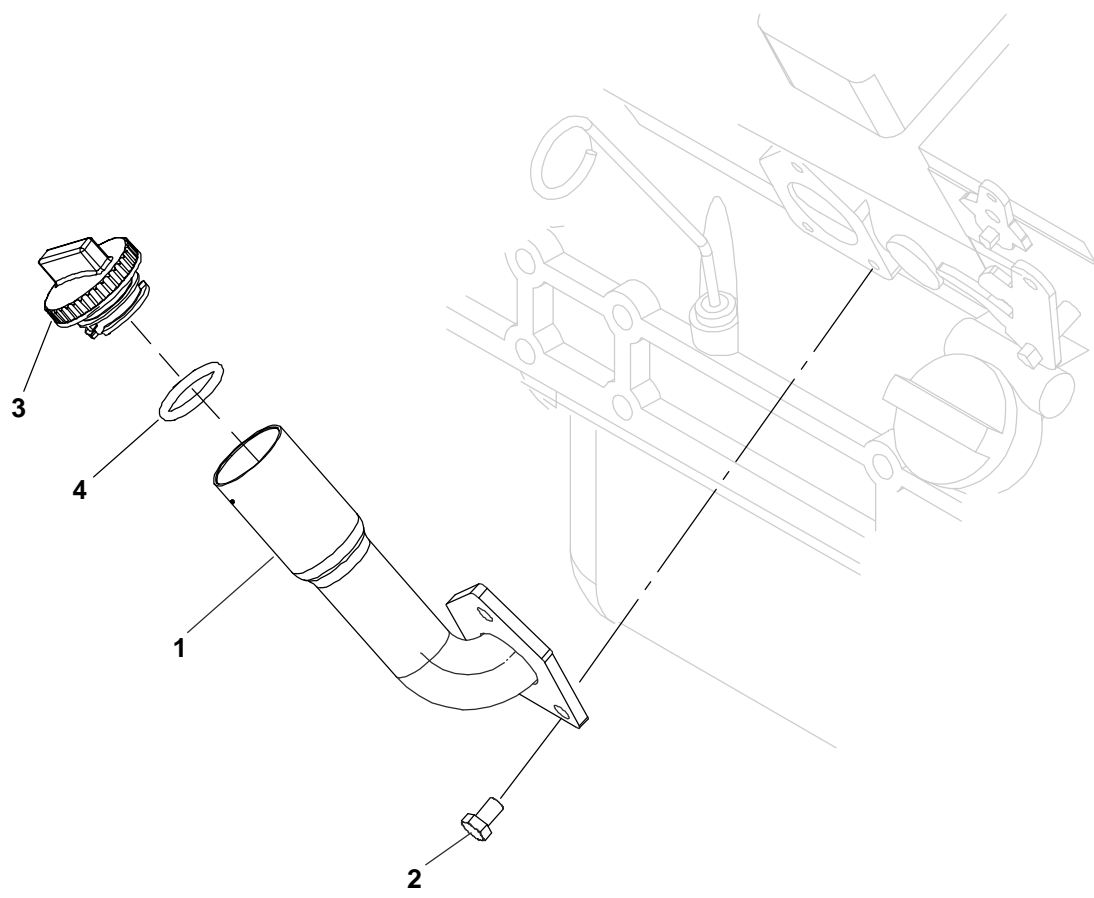
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	187-1224	1	Alternator (12V, 20A)	5	187-1055	1	Washer, Spring
1	187-1282	1	Plate Assy (Includes Bushings and Bearings)	6	187-1054	1	Nut
2	187-1283	1	Pulley	7	187-1284	1	Regulator
3	187-1305	1	Screw	8	187-1306	2	Screw
4	187-1056	1	Washer	9	187-1326	2	Washer
				10	187-1285	1	Cap, Terminal

Alternator Mounting



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1345	1	Spacer	4	187-1015	1	Bolt
2	187-1051	1	Plate, Adjustment	5	187-1020	1	Nut
3	187-1010	1	Bolt				

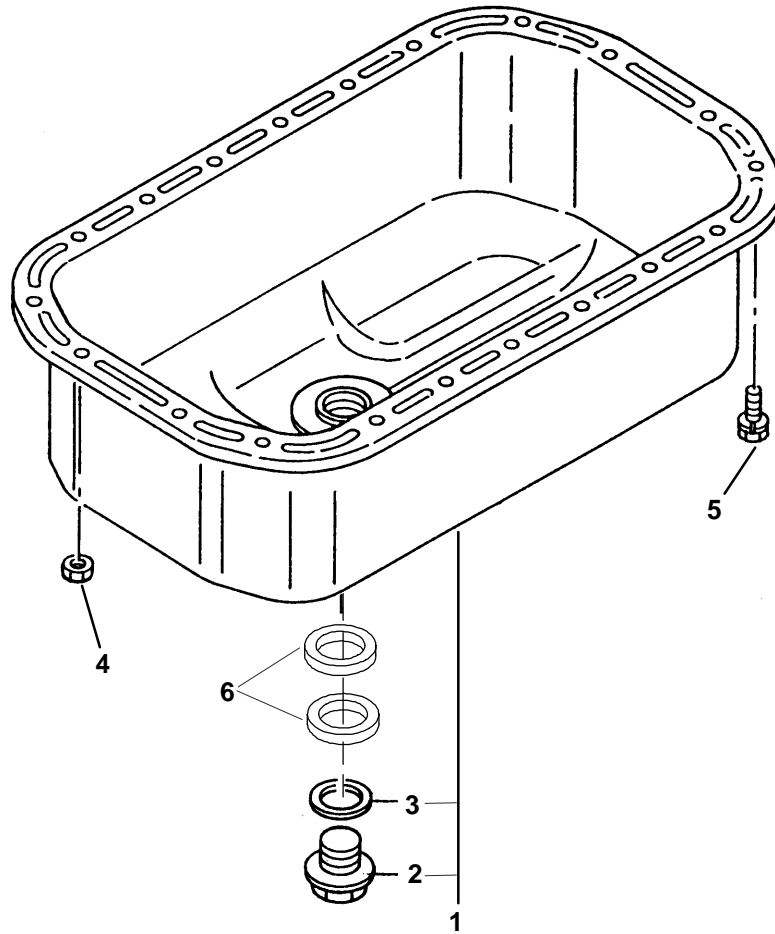
Oil Fill Tube



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	123-2113-02	1	Tube, Oil Fill
2	800-2027	3	Screw, Hex Head Cap (M6 x 1 x 10mm)

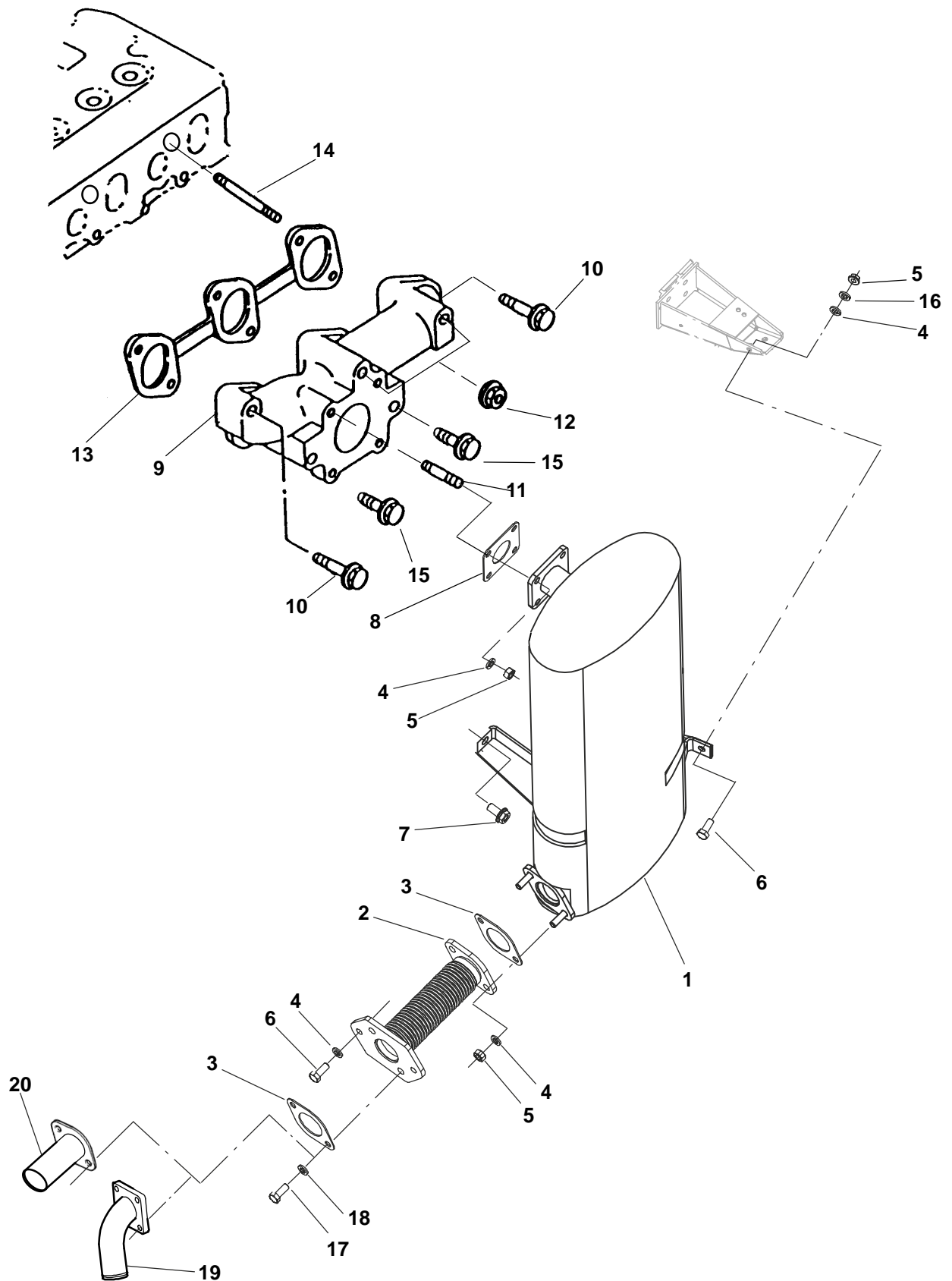
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
3	130-4450-01	1	Cap, Push-On
4	509-0329	1	O'Ring

Oil Base



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	187-1203	1	Pan, Oil (Includes Plug and O'Ring)	4	187-1018	2	Nut
2	187-1336	1	Plug	5	187-1002	2	Bolt
3	187-1028	1	O'Ring, Oil Drain Plug	6	403-3859	2	Seal, Oil Drain

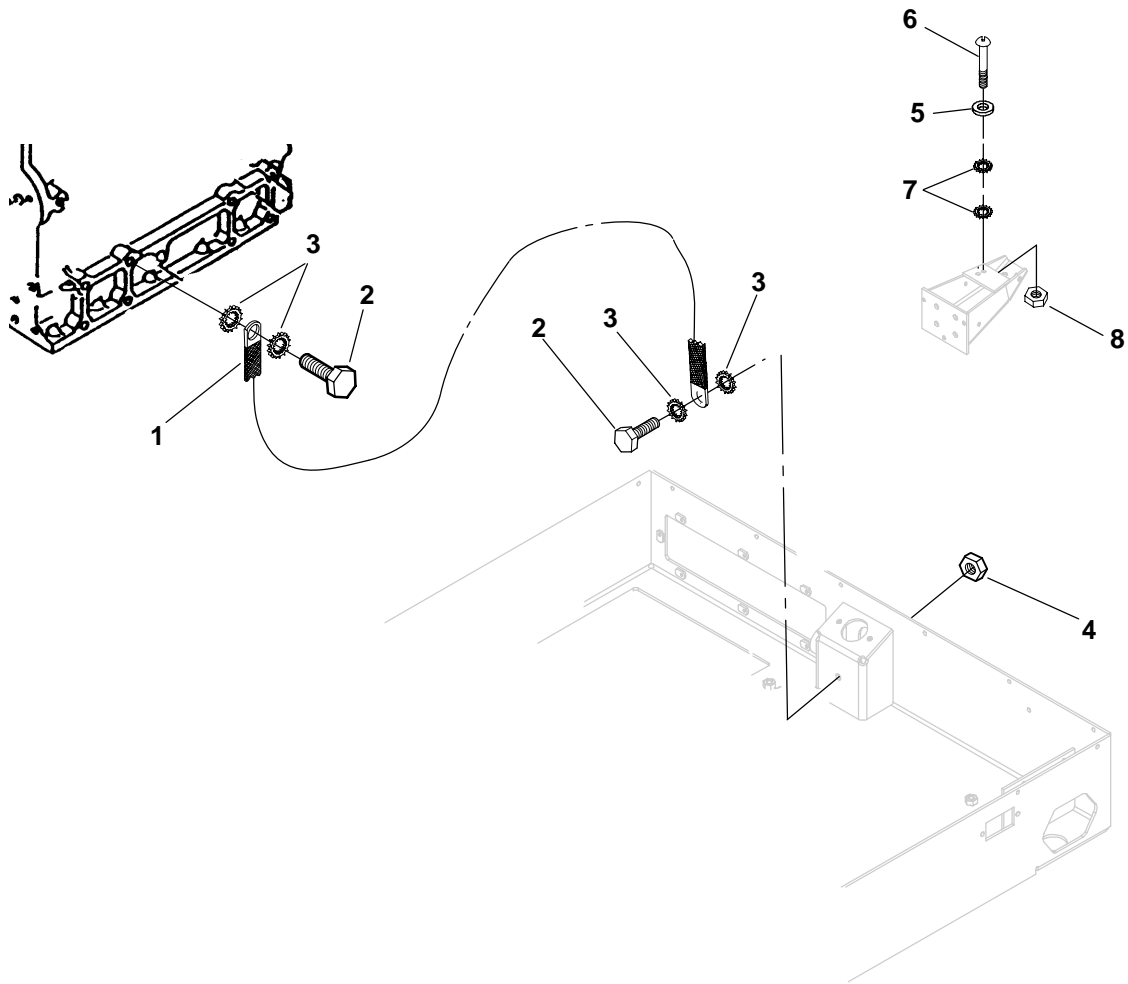
Exhaust System



Exhaust System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-3151	1	Muffler	11	187-1309	4	Stud (20mm)
2	154-3033	1	Pipe, Flex Exhaust	12	187-1019	6	Nut
3	154-2800	2	Gasket, Exhaust Manifold	13	187-1219	1	Gasket, Exhaust Manifold
4	850-2008	9	Washer, Spring Lock (M8)	14	187-1033	2	Stud, Manifold (79mm)
5	860-2008	7	Nut, Hex (M8 x 20mm)	15	187-1013	2	Bolt (70mm)
6	800-2057	3	Screw, Hex Head Cap (M8 x 1.25 x 20mm)	16	526-2100	1	Washer (M8)
7	821-2060	1	Screw, Lock Flange (M10 x 1.5 x 20mm)	17	800-0730	2	Screw, Hex Head (5/16-18 x 1")
8	187-1194	1	Gasket, Exhaust Manifold	18	526-0115	2	Washer, Flat (5/16")
9	187-1207	1	Manifold, Exhaust	19	155-3194	1	Elbow, Exhaust
10	187-1010	2	Bolt (40mm)	20			Tube, Exhaust
					155-2610	1	3"
					155-2424	1	7"

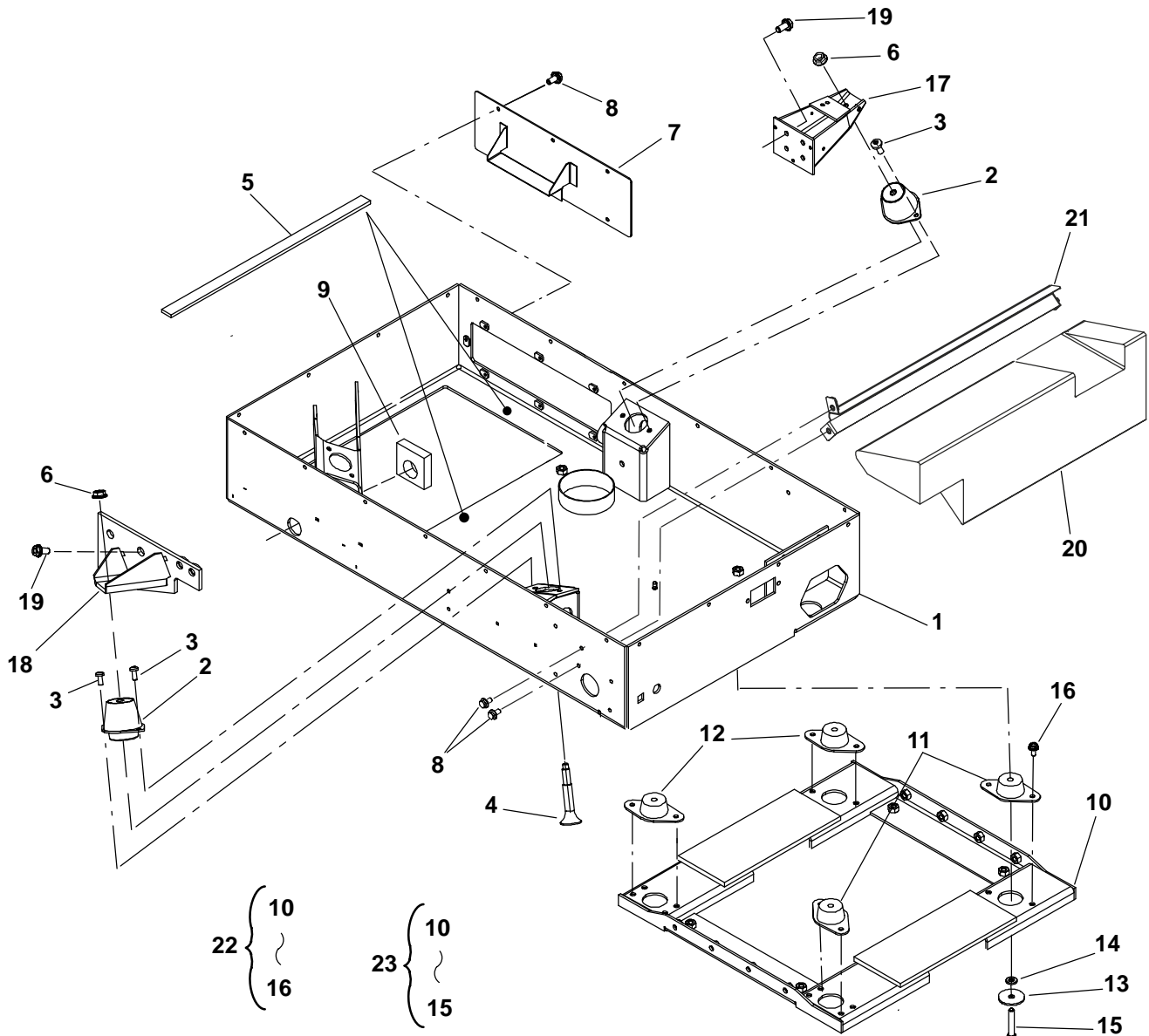
Ground System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	337-0090	1	Strap, Electrical
2	800-2085	2	Screw, Hex Head Cap (M10 x 20)
3	856-0010	4	Washer, EIT Lock (3/8")
4	860-2009	1	Nut, Hex (M10)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	526-0052	2	Washer, Flat (M10)
6	810-0155	2	Screw, Round Head Brass Machine (M10 x 1.5 x 20mm)
7	856-0006	4	Washer, EIT Lock (1/4")
8	871-0016	1	Nut, Hex (1/4-20)

Mounting System



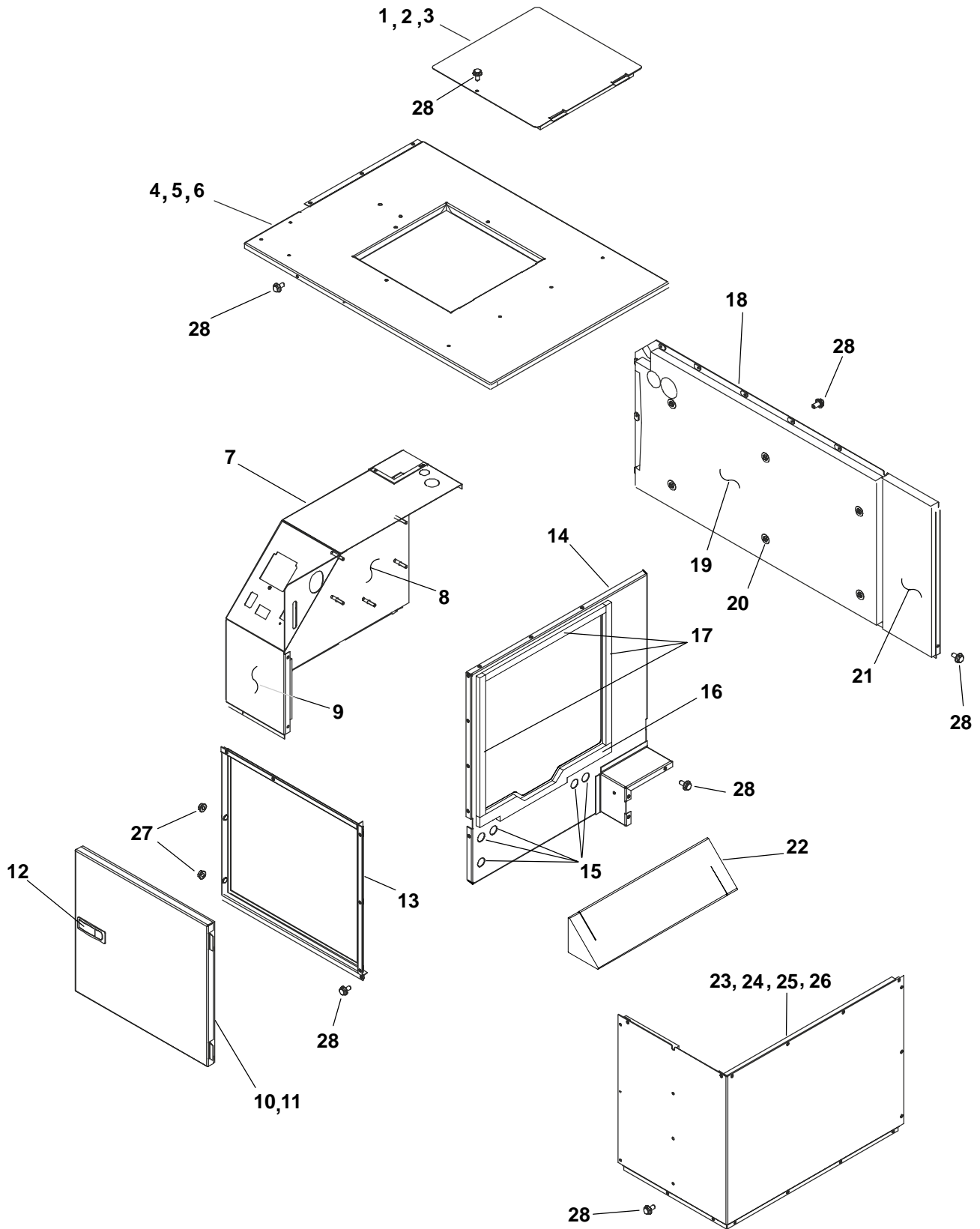
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	403-4171-02	1	Base, Mounting
2	402-0680-02	3	Isolator, Engine
3	823-1002-04	6	Screw, Pan Head (M6 x 1 x 14mm)
4	815-0861	3	Screw, Isolator Mount
5	130-4724-01	3	Seal, Radiator 514.6mm
	130-4724-02	2	305.2mm
6	870-2056	3	Nut, Lock Flange (M10 x 1.5mm)
7	403-4213-02	1	Cover
8	821-2096-02	8	Screw, Lock Flange (M6 x 1 x 12mm)
9	403-4219	1	Seal, Radiator Drain
10	403-4264-02	1	*Frame, Mounting
11	402-0728-01	2	+*Isolator, Vibration
12	402-0728-02	2	+*Isolator, Vibration
13	526-0324	4	+*Washer, Flat (.406mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
14	526-0174	4	+*Washer, Flat (.406mm)
15	800-0055	4	+*Screw, Hex Head Cap (3/8-16 x 2.25")
16	821-2045	8	*Screw, Lock Head Flange (M8 x 1.25 x 16mm)
17	403-4173-02	1	Bracket, Mounting
18	403-4197-02	1	Bracket, Mounting
19	821-2060	7	Screw, Lock Head Flange (M10 x 1.5 x 20mm)
20	403-4275	1	Insulation, Skid Base
21	403-4276-02	1	Bracket, Foam
22	402-0752	1	Kit, Isolator Mounting (Includes Parts Marked *)
23	542-0266	1	Kit, Isolator Mounting (Includes Parts Marked +)

* - Parts Included in Isolator Mounting Kit (W/Frame).

+ - Parts Included in Isolator Mounting Kit (W/O Frame).

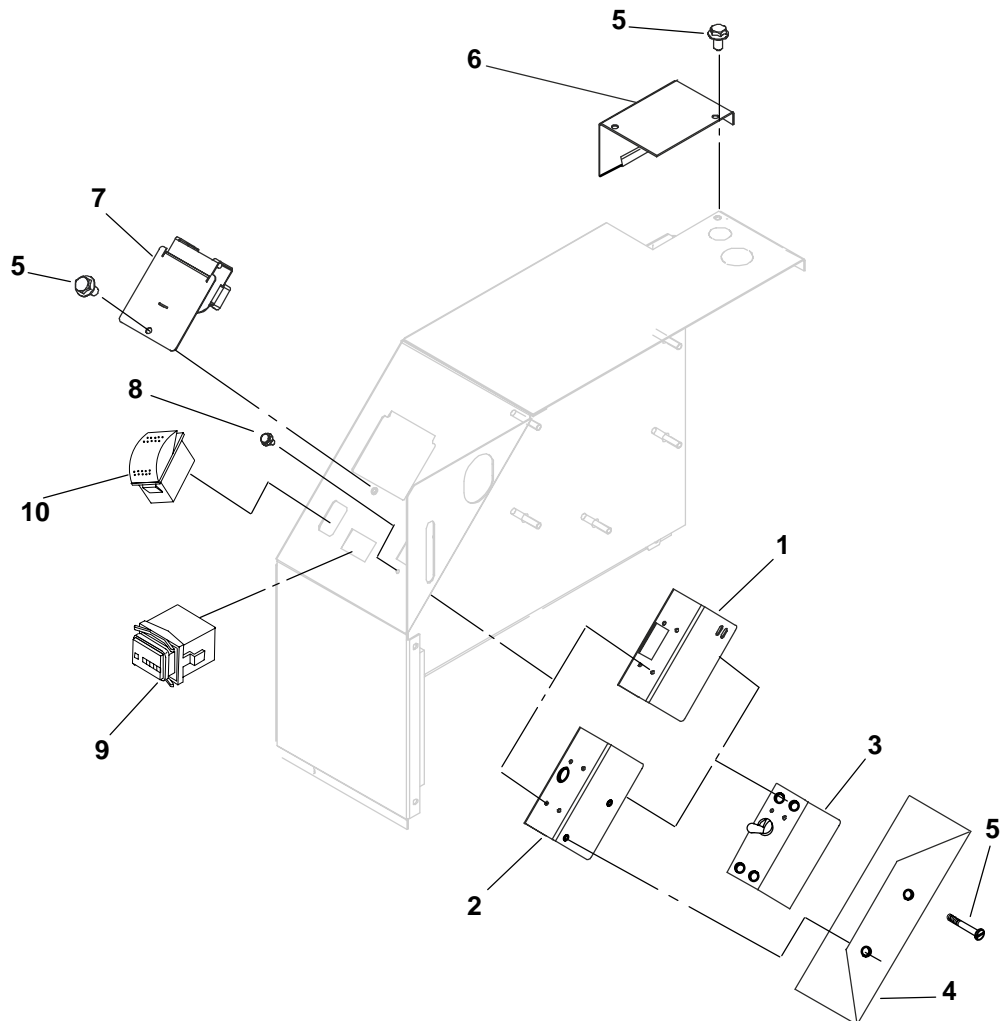
Housing



Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Cover Assy, Access (Includes Insulation and Nuts)	14	405-6066	1	Baffle Assy (Includes Grommets and Seals)
	405-5897-01	1	HDCAA, HDCAB	15	508-1122	5	Grommet
	405-5897-02	1	HDCAC	16	130-4746-01	1	Seal, Fan (460mm)
2	405-5882	1	Insulation, Access Cover	17	130-4746-02	3	Seal, Fan (420mm)
3	518-0581	2	Nut, Push-On	18			Panel Assy, Rail (Includes Insulation and Nuts)
4			Panel Assy, Top (Includes Insulation and Nuts)		405-5890-01	1	HDCAA, HDCAB
	405-5887-01	1	HDCAA, HDCAB		405-5890-02	1	HDCAC
	405-5887-02	1	HDCAC	19	405-5878	1	Insulation, Rail Panel
5	405-5879	1	Insulation, Top Panel	20	518-0581	6	Nut, Push-On
6	518-0581	7	Nut, Push-On	21	405-5891	1	Insulation, Rail Panel
7	405-5892-01	1	Panel Assy, Cap (Includes Insulation)	22	403-4274	1	Insulation, Skid Base
8	405-5881	1	Insulation, Cap	23			Panel Assy, Engine (Includes Insulation)
9	405-5888	1	Insulation, Cap		405-5889-01	1	HDCAA, HDCAB
10			Door Assy (Includes Insulation and Latch)		405-5889-02	1	HDCAC
	405-5895-01	1	HDCAA, HDCAB	24	405-5885	1	Insulation, Panel (439 x 577mm)
	405-5895-02	1	HDCAC	25	405-5880	1	Insulation, Panel (181.4 x 420.5mm)
11	405-5886	1	Insulation, Access Cover	26	405-6121	1	Insulation, Panel (118.4 x 200mm)
12	405-5884	1	Latch, Access Cover	27	870-2054	2	Nut, Lock Flange (M6 x 1)
13			Frame, Door	28	821-2096-02	71	Screw, Lock Flange
	405-5932-02	1	HDCAA, HDCAB				
	405-5932-03	1	HDCAC				

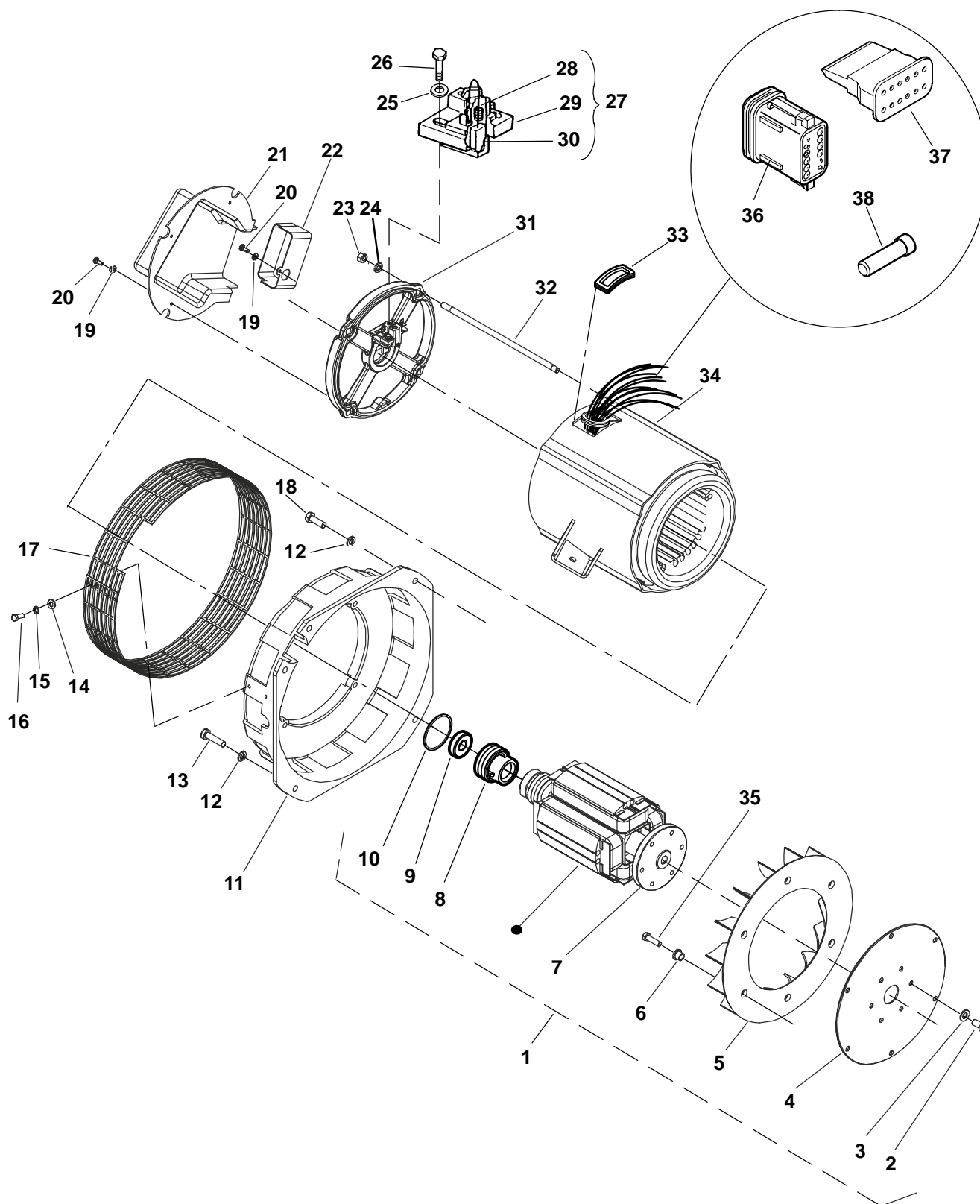
Housing End Cap



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	320-1968-02	1	Guard, CB (HDCAA, HDCAB)
2	320-2012-02	1	Guard, Upper CB (HDCAC)
3			Breaker, Circuit
	320-1984-08	1	HDCAA (45A)
	320-1984-09	1	HDCAB (50A)
	320-2014-08	1	HDCAC (45A)
4	320-2013-02	1	Guard, Lower CB (HDCAC)
5			Screw, Lock Flange
	821-2096-02	3	HDCAA, HDCAB
	821-2096-02	5	HDCAC

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	405-5380-05	1	Cover, AC
7	405-5309-03	1	Cover, Access
8	815-0549-01	4	Screw, Pan Head (6-32 x 1/4)
9	302-2002	1	Meter, Hour
10	308-1038	1	Switch, Rocker

Generator

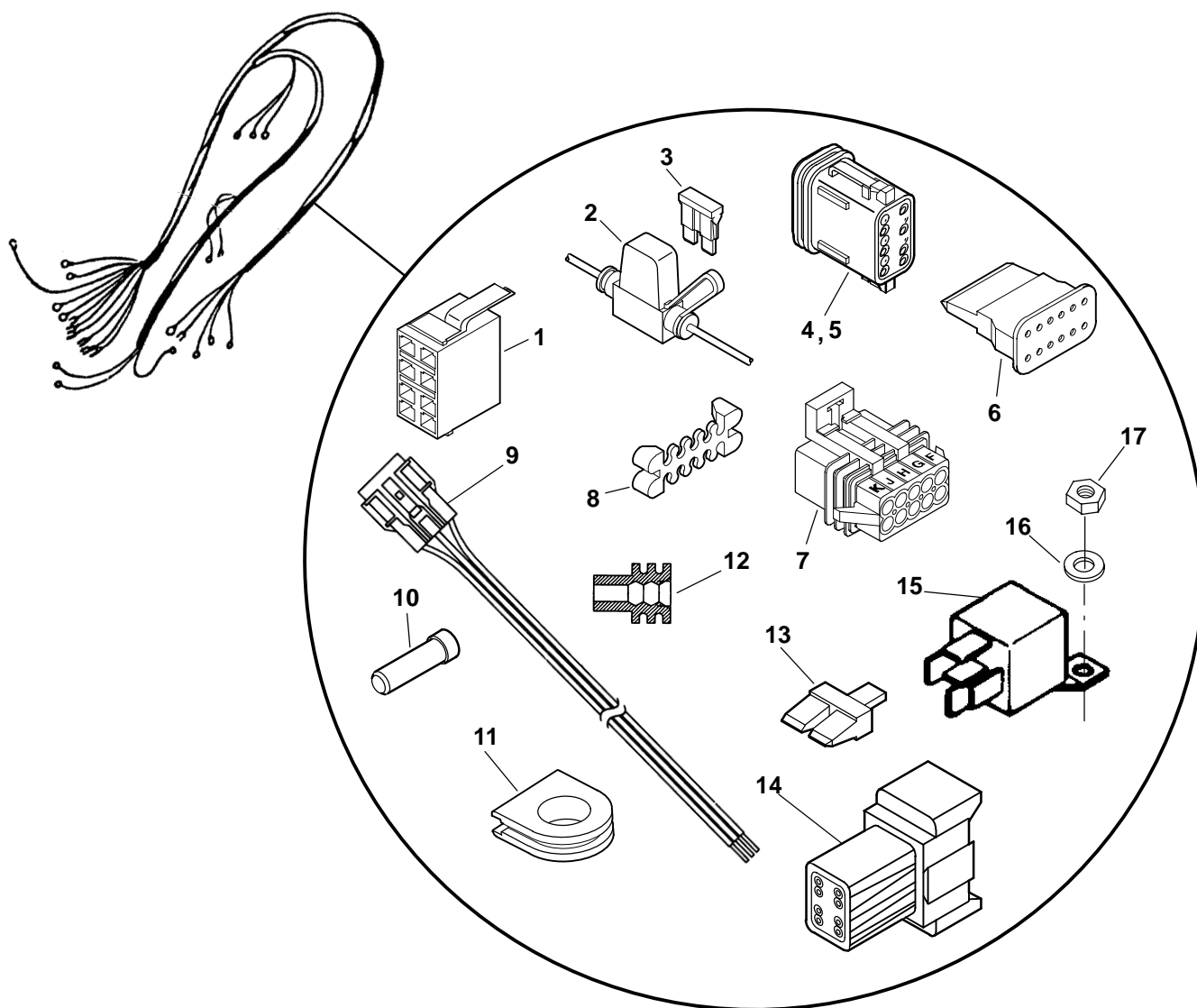


Generator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Rotor Assy, Generator (Includes Parts Marked *)	21	211-0488	1	Intake, Endbell
	201-3506-03	1	HDCAC, HDCAB	22	211-0489-02	1	Duct, Inlet
	201-3549-03	1	HDCAC	23	862-0026-07	4	Nut, Hex (3/8-16)
2	800-2056	6	*Screw, Hex Head Cap (M8 x 1.25 x 16mm)	24	526-0029	4	Washer, Flat
3	526-2103	6	*Washer, Flat (M8)	25	526-0399-56	2	Washer, Flat (M5)
4	232-3915	1	*Disc, Generator Drive	26	800-0309-89	2	Screw, Hex Head Machine (M5 x 0.8 x 16)
5	205-0220	1	*Fan, Generator	27	212-1285	1	Block Assy, Generator Brush (Includes Spring, Block and Brush)
6	232-3296	6	*Spacer, Fan	28	212-1276-03	2	Spring, Generator Brush
7	232-3753	1	*Hub, Rotor Drive	29	212-1286	1	Block, Brush
8	204-0134	1	*Ring, Collector	30	214-0103	2	Brush, Generator
9	510-0099	1	*Bearing, Ball	31	211-0447	1	Endbell
10	509-0196	1	O'Ring	32	520-1000-03	4	Stud (284mm)
11	231-0379	1	Adapter, Generator	33	508-1049-02	1	Edging
12	850-2010	5	Washer, Lock	34			Stator, Generator
13	800-2087	4	Screw, Hex Head Cap (M10 x 30mm)		220-4543-03	1	HDCAA, HDCAB
14	526-2080	2	Washer, Flat (M6)		220-4543-05	1	HDCAC
15	850-2005	2	Washer, Lock	35	800-2515	6	Screw, Hex Head Cap (M8 x 1.25 x 30mm)
16	800-2006	2	Screw, Hex Head Cap (M5 x 14mm)	36	323-1541	1	Plug (8 Pin)
17	232-3755-02	1	Guard, Fan	37	323-1543	1	Plug, Wedge
18	800-2089	1	Screw, Hex Head Cap (M10 x 1.5 x 40mm)	38	323-1591	1	Plug, Seal
19	526-2050	4	Washer, Flat (M4) (M4 x 0.7 x 10mm)				
20	815-0865-05	4	Screw, Pan Head (M4 x 0.7 x 10mm)				

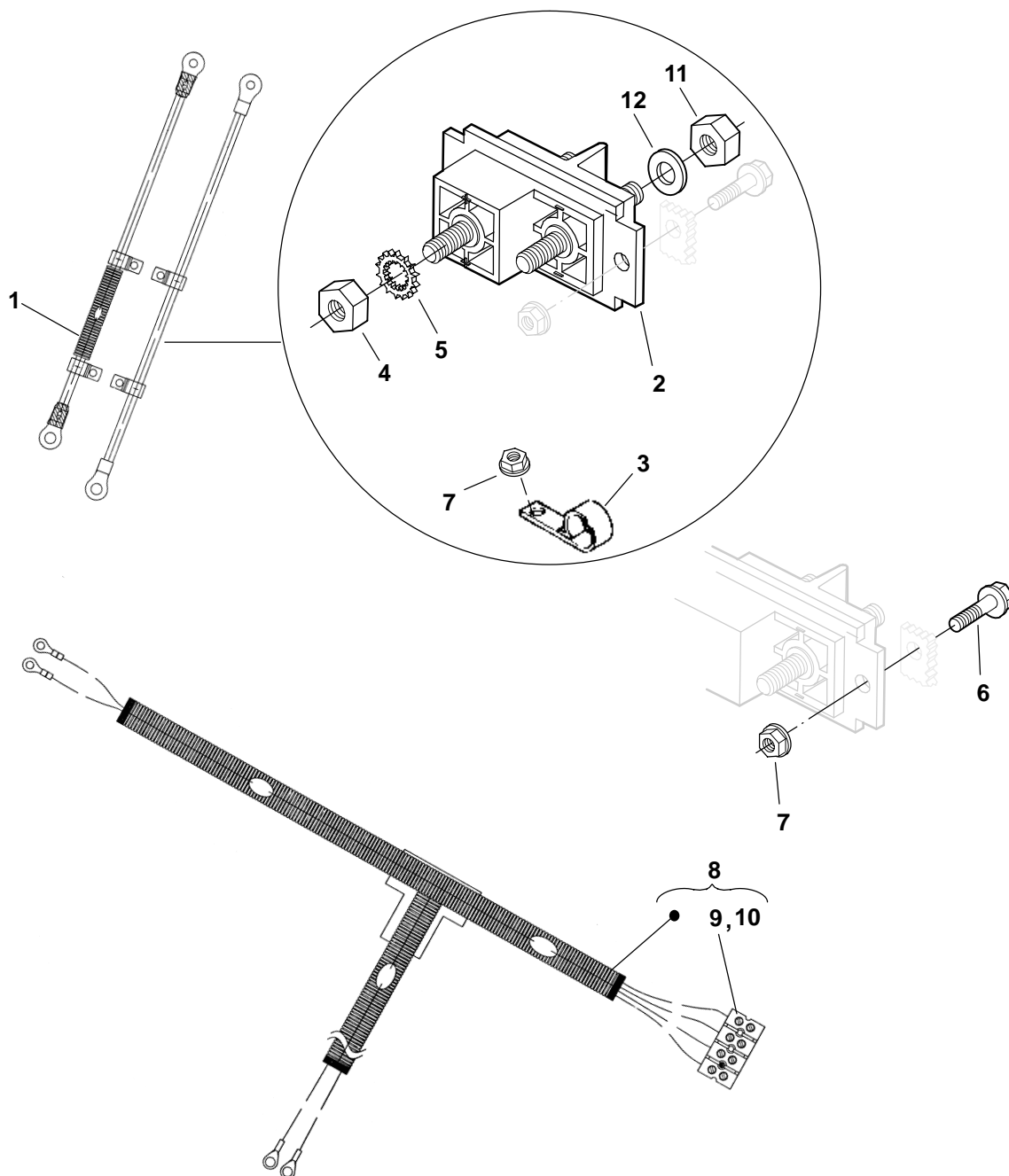
* – Parts Included in Generator Rotor Assy.

Engine Harness



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	338-3575	1	Harness, Engine	10	323-1591	2	Plug, Cavity
1	308-1019	1	Connector, Switch (P9)	11	508-1105	1	Grommet
2	321-0322	2	Holder, Fuse (F1)	12	323-1708	AR	Seal, Cable
3	321-0321-07	1	Fuse (F1) (15A)	13	323-1544	1	Wedge (J3)
4	323-1582	1	Connector, Plug (12 Pin) (P1)	14	323-1542	1	Connector (8 Pin) (J3)
5	323-1582-02	1	Connector, Plug (12 Pin) (P2)	15	307-1886	2	Relay (K1)
6	323-1583	2	Wedge, Plug (12 Pin) (P1, P2)	16	526-0003	2	Washer
7	323-1711	1	Connector, Plug (10 Pin) (P8)	17	860-2005	2	Nut, Lock Flange (M4 x 1)
8	323-1719	1	Lock, Housing				
9	323-1773	AR	Connector, Alt				

Battery/AC Harness

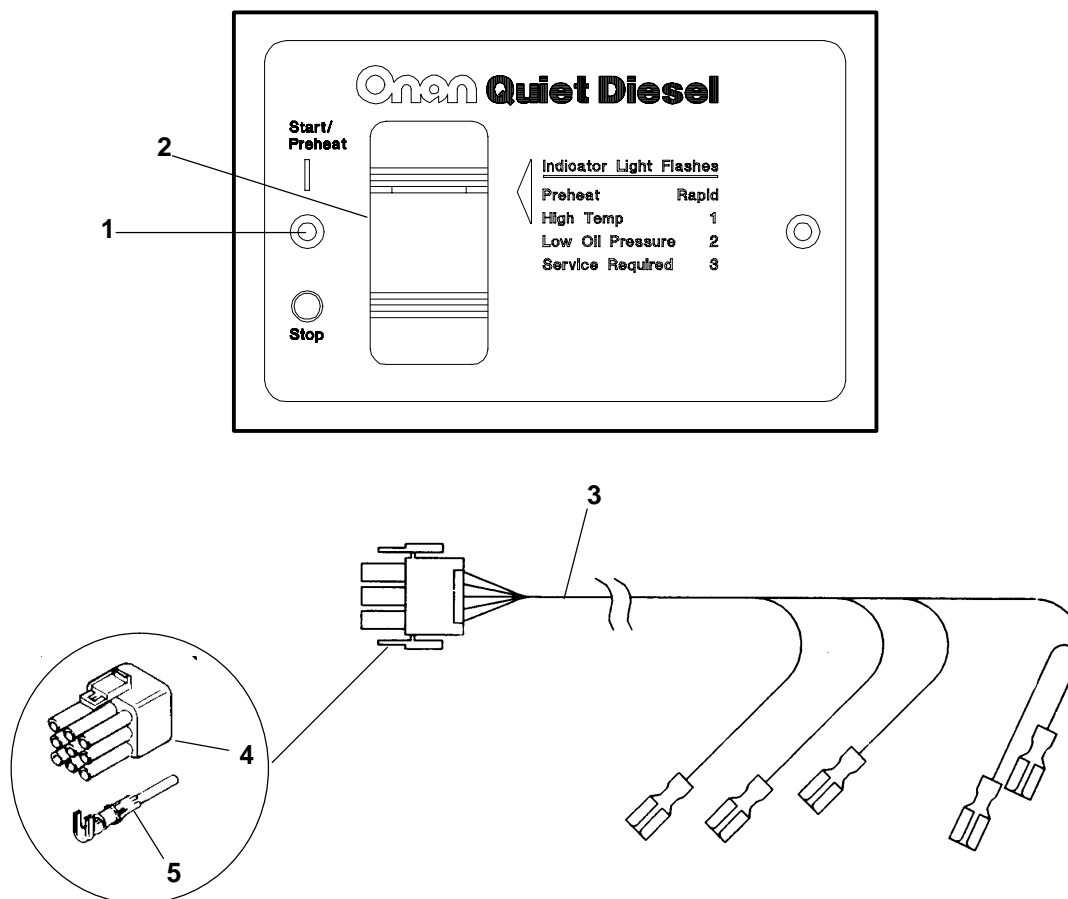


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	338-3577	1	Harness, Wiring (Includes Parts Marked *)
2	332-3408	1	*Block, Terminal (TB1)
3	332-1554	4	*Clamp, Insulated Loop
4	862-0015	2	*Nut, Hex (5/16-18)
5	856-0008	2	*Washer, EIT Lock (5/16-18)
6	821-2096-03	2	Screw, Lock Flange (M6 x 1 x 16mm)
7	870-2054	5	Nut, Lock Flange (M6 x 1)
8	338-3576	1	Harness, AC (Includes AC Terminal Block)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	332-3531-03	1	Block, AC Terminal (TB2)
10	812-0070	2	Screw, Round Head Machine (6-32 x 1-1/4")
11	871-0025	2	Nut, Hex Brass (5/16-18)
12	526-0054	2	Washer, Flat (5/16")

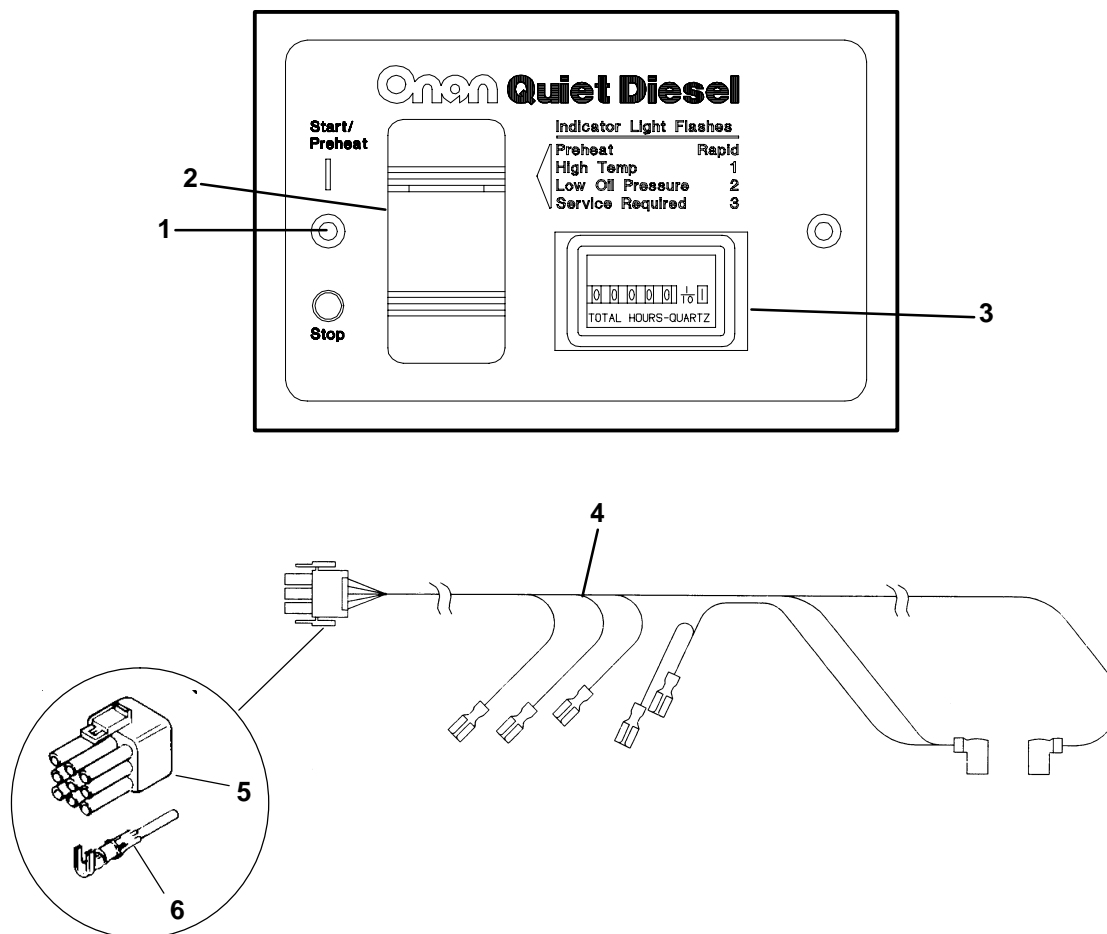
* - Parts Included in Battery Wiring Harness.

Remote Switch Panel



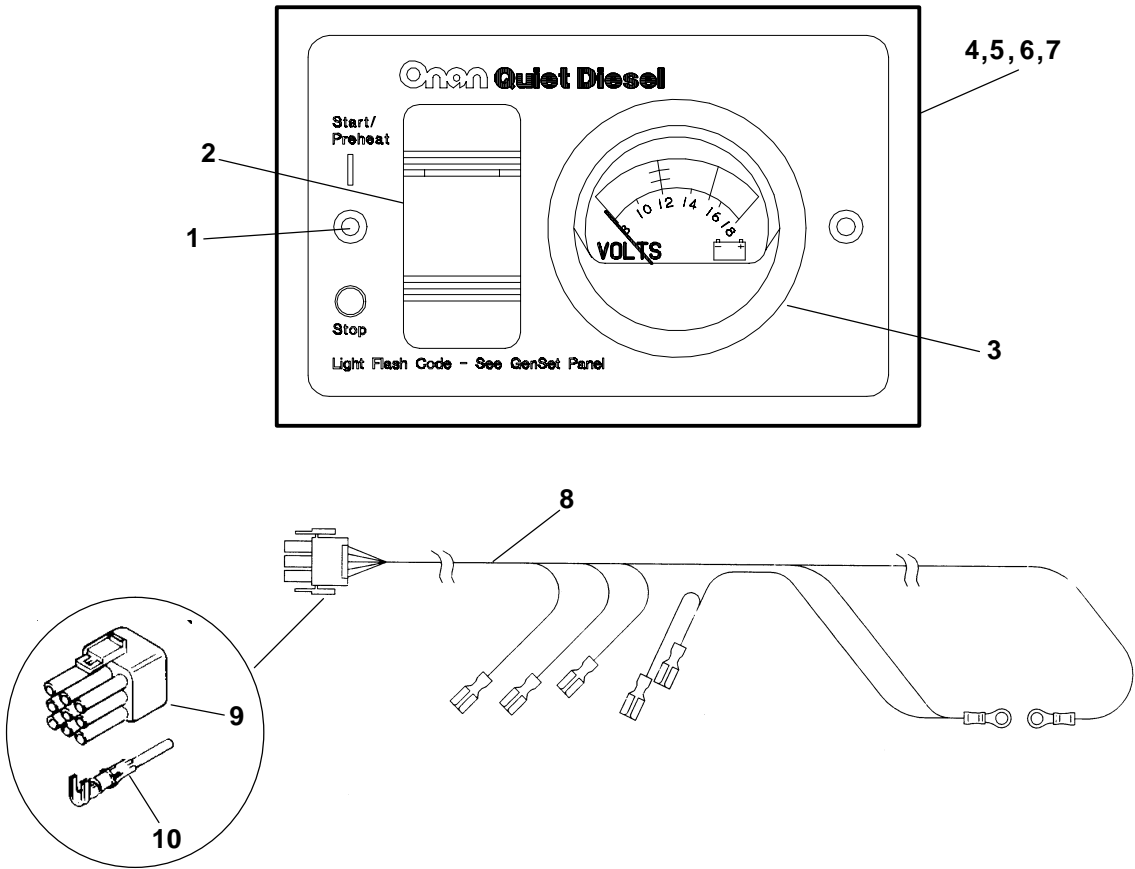
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	300-4942	1	Kit, Switch Only Remote Panel	4	323-1291	1	Plug (9 Pin)
1	815-0910	2	Screw, Wood Mounting (#6 x 1)	5	323-1199	4	Pin, Contact
2	308-1062	1	Switch, Rocker				
3	338-3512	1	Harness, Remote Panel (Includes Pins and Plug)				

Remote Switch/Hourmeter Panel



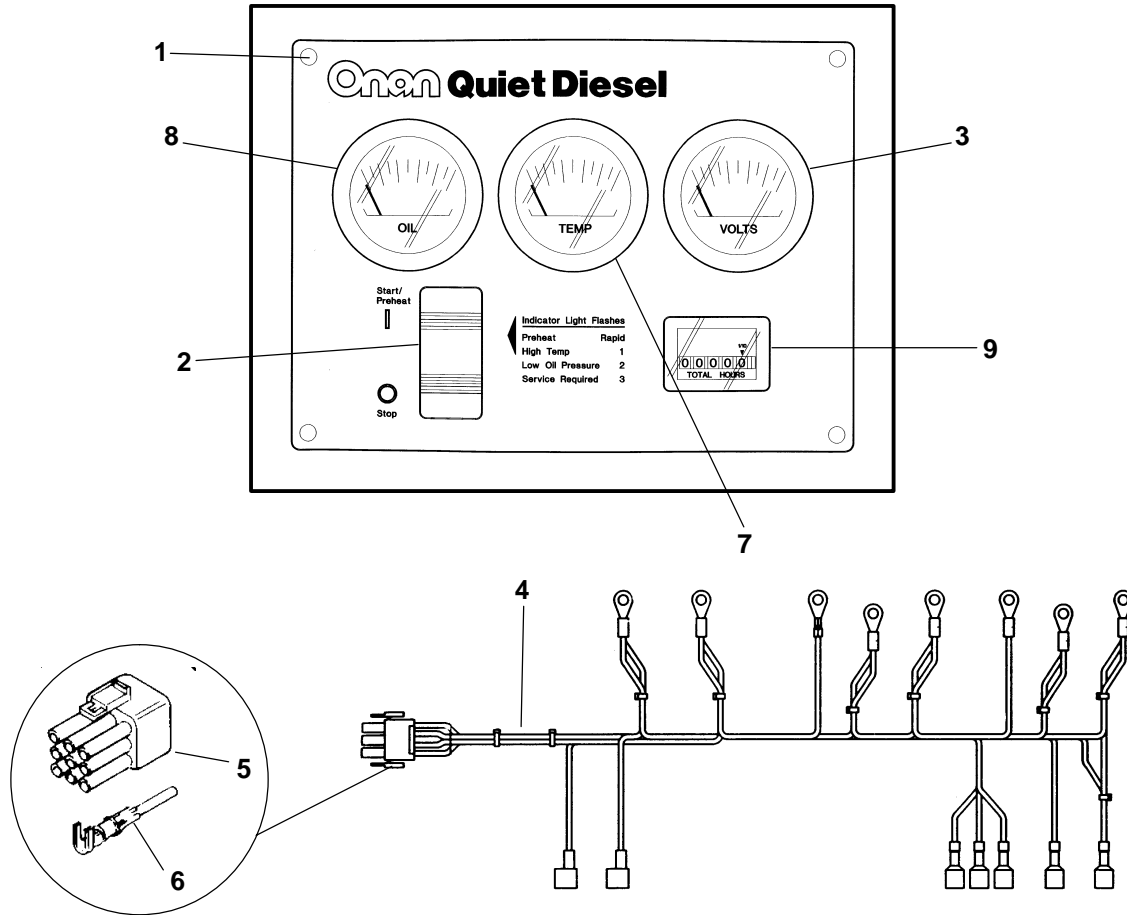
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	300-4943	1	Kit, Switch/Hourmeter Remote Panel	3	302-2002	1	Meter, Hour
1	815-0910	2	Screw, Wood Mounting (#6 x 1)	4	338-3475	1	Harness, Remote Panel (Includes Pins and Plug)
2	308-1062	1	Switch, Rocker	5	323-1291	1	Plug (9 Pin)
				6	323-1199	4	Pin, Contact

Remote Switch/Voltmeter Panel



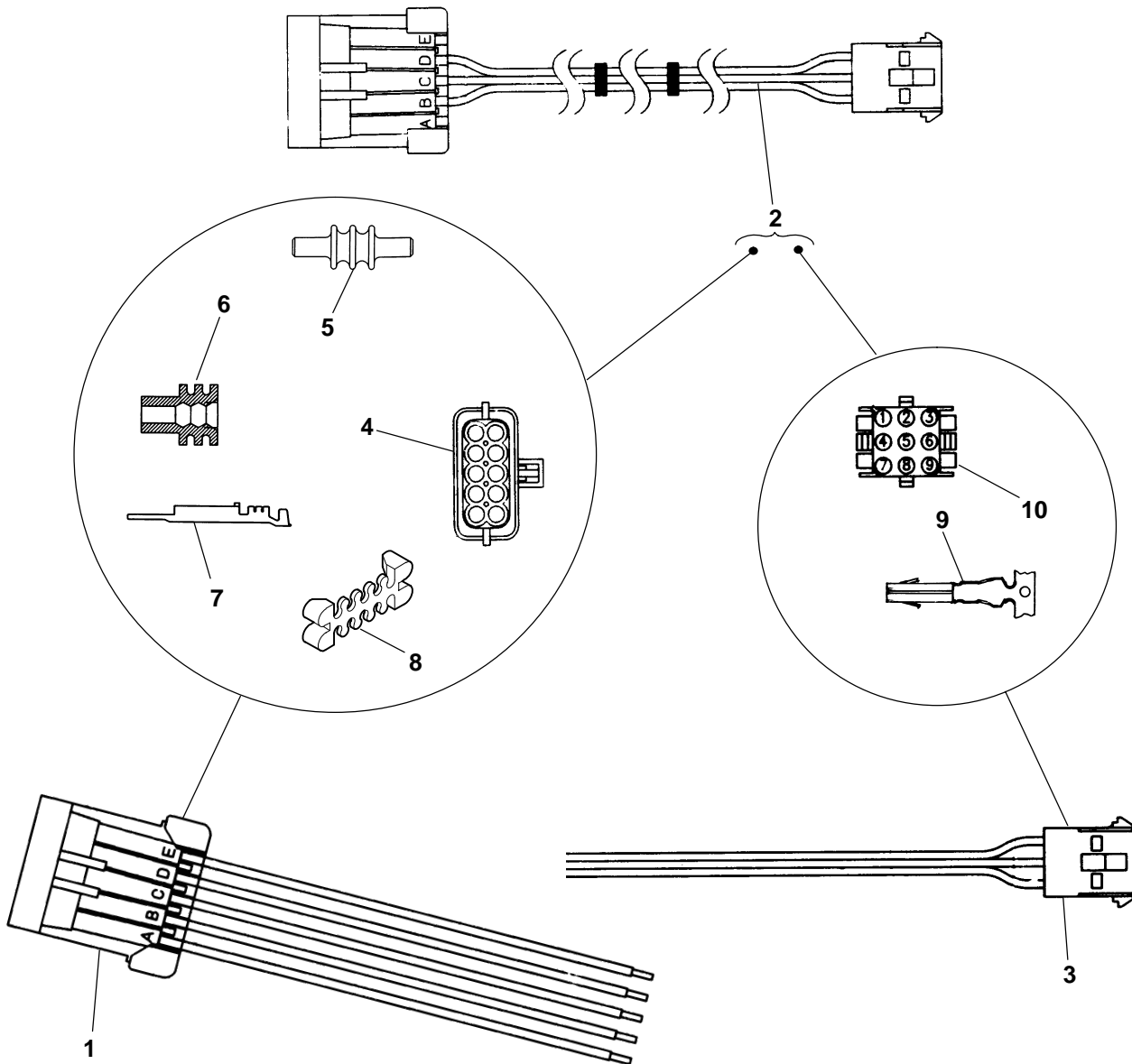
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	300-4944	1	Kit, Switch/Voltmeter	7	850-0030	2	Washer, Lock
1	815-0910	2	Screw, Wood Mounting (#6 x 1)	8	338-3509	1	Harness, Remote Panel (Includes Pins and Plug)
2	308-1062	1	Switch, Rocker	9	323-1291	1	Plug (9 Pin)
3	302-1641	1	Meter, Voltage	10	323-1199	4	Pin, Contact
4	526-0409	2	Washer, Nylon				
5	526-0049	4	Washer, Flat				
6	871-0010	4	Nut, Hex Brass Machine (10-32)				

Remote Gauge Panel



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	300-5027	1	Kit, Remote Gauge Panel	5	323-1291	1	Plug (9 Pin)
1	808-0023	4	Screw, Pan Head Sheet Metal Mounting (#8 x .50)	6	323-1199	4	Pin, Contact
2	308-1062	1	Switch, Rocker (SPDT)	7	193-0351	1	Gauge, Water Temperature
3	302-1641	1	Meter, Voltage	8	193-0352	1	Gauge, Oil Pressure
4	338-3637	1	Harness, Remote Panel (Includes Plug and Pins)	9	302-2002	1	Meter, Hour

Remote Harnesses



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	300-4947	1	Harness, Remote (Includes Parts Marked *)
2			Harness, Remote Panel (Includes Parts Marked +)
	338-3490-01	1	10'
	338-3490-02	1	30'
3	338-3573	1	Harness, Adapter (Includes Parts Marked #)
4	323-1710	1	+* Connector, Receptacle
5	323-1712	2	+* Plug, Cavity

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	323-1708	8	+* Seal, Cable
7	323-1707	8	+* Pin, Contact
8	323-1719	1	+* Housing, Lock
9	323-1200	AR	+ # Socket, Contact
10	323-1325	1	+ # Cap, Connector

* - Parts Included in Remote Harness (300-4947).

+ - Parts Included in Remote Panel Harness (338-3490).

- Parts Included in Adapter Harness (338-3573).

Labels, Miscellaneous

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
098-7465-03	1		Label, Control Face				Parts Marked *)
			Label, Control Panel	098-7464	1		*Label, Coolant Drain
098-7399-01	1		45A, 2 Pole	098-7463	1		*Label, Fuel Attachment
098-7399-02	1		50A, 2 Pole	098-6476	1		Label, Ground
098-7466	1		Label, Control Rear	098-6877	1		*Label, Hot/Cold
098-7464	1		Label, Coolant Drain	098-7462	1		*Label, Service Information
098-7463	1		Label, Fuel Attachment	098-7498-01	1		*Label, Warning Hazardous Voltage (Terminal ID)
098-7462	1		Label, Service Information				
			Label, Model Ident	098-7128	2		*Label, Warning Hazardous Voltage/Rotational Parts
098-7398-01	2		HDCAA	098-7130	1		*Label, Warning Heat
098-7398-02	2		HDCAB	098-7515-01	1		Label, Warning Voltage
098-7369-01	2		HDCAC				
098-7461	1		Label, Warning Hazardous Voltage				
098-7130	1		Label, Warning Heat				
098-7497-01	1		Label, Warning Install				
098-7476	1		Label, Packaged (Includes				

* – Parts Included in Label Package.

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